VIOLENCE PREVENTION: EVALUATION OF AN ADAPTED CURRICULUM

Sharon Lee Walker, B.S., M.S., M.P.H.

Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

May 2000

APPROVED:

Susan Brown Eve, Major Professor
Thomas L. Evenson, Minor Professor
Stanley R. Ingman, Committee Member
William L. McKee, Committee Member
Rudy Ray Seward, Committee Member
Dale E. Yeatts, Chair of the Department of Sociology
David W. Hartman, Dean of the School of Community Service
C. Neal Tate, Dean of the Robert B. Toulouse School of Graduate Studies

Walker, Sharon Lee, Violence Prevention: Evaluation of an Adapted Curriculum. Doctor of Philosophy (Sociology), May 2000, 101 pp., 25 tables, 8 figures, 8 appendices, reference list, 41 titles.

The Prothrow-Stith violence prevention curriculum for high school students was adapted and presented to middle school students. An adaptation in materials, reading level and administration should not adversely effect the outcome of program participation, as the concepts that form the foundation of this curriculum are applicable to all ages.

The essential question addressed in this study is as follows: Is the adapted curriculum effective? The evaluation instrument used for both pretests and posttest showed three distinct sections that were composed of general knowledge statements; statements that indicated an attitudinal predisposition toward violence; and statements that indicated a behavioral predisposition toward violence. After factor analysis the general knowledge section showed three grouping factors: factual knowledge, murder knowledge and alcohol knowledge. Factor analysis of the attitude section yielded two factors: a positive attitudinal predisposition toward violence and a negative predisposition toward violence.

Seven hypotheses were tested. The analysis showed in a significant difference between the pretest and posttest for all respondents as an increase in factual knowledge; a decrease in negative attitude predisposition toward violence; and, a decrease in behavioral predisposition toward violence. There was a significant difference between the participating schools; there was no significant difference between the ages; and, results for females differed significantly from those for males.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ILLUSTRATIONS

CHAPTER 1

INTRODUCTION

As a term, violence describes a variety of destructive personality traits and antisocial behaviors. The magnitude of violence as a public health issue was recognized by the World Health Organization (WHO) in the mid-1980s because, as a global public health problem, it is a leading cause of death and disability. Figure 1 shows the WHO 1994 top five rates for reporting countries of murders in their young male populations.

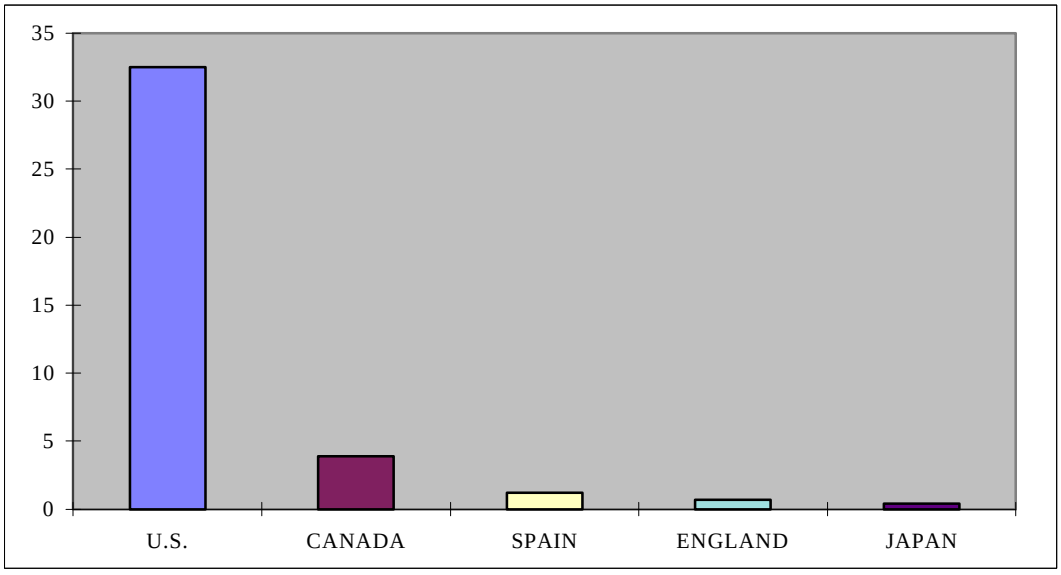

Figure 1. 1994 murder rate for males between ages 15 and 24 per 100,000. (WHO 1996).

America's infatuation with violence extends to the media, sports, politics, the military, and even churches and schools (Brendtro & Long, 1995). In their article, Brendtro and Long described sources of stress for children as a conglomerate of influences from home, society, and schools, with resultant behavior manifested through

escalation to violent acts because they (the children) cannot disengage from confrontations.

Children are being educated in the streets, by their peers and by the media. Many of them demonstrate a blatant lack of appropriate values and a lack of respect for others as well as for themselves. Young men growing up this way have no access to positive role models, and they are almost always the victims of negative labeling. They frequently feel useless, powerless, and on the outside of “mainstream” society. The processes that produce these feelings and the resulting negative outcome are usually institutional, built into the policies and customs of the organizations with which the young men come in contact, notably school, work, and the juvenile justice system (Martin, 1991). Aggression, callousness, stress, high mobility, and homelessness may be abnormal for advantaged youths, but for those who grow up in neighborhoods pervaded by these dynamics, they are commonplace (Dill & Haberman, 1995).

In the United States, the Centers for Disease Control (CDC) have acknowledged violence as a priority public health concern. "Healthy People 2000: National Health Promotion and Disease Prevention Objectives" (U.S. Department of Health and Human Services [USDHHS], 1990), the government document that identifies the Public Health Service objectives for improving the nation’s health over the next decade, emphasizes the need to prevent the violence affecting the lives of children and adolescents.

The state of Texas is known and revered for its independent, machismo image. This image has been perpetuated through television media via such popular television programs as “Walker, Texas Ranger.” Gang activity, kidnapping, fist fighting, use of hand

guns and assault weapons, extortion, and brutality against women and children have all been glamorized on this show in the name of entertainment. This provides but one example of the media portrayal of violence, particularly as it continues to project an image of Texas.

Crime analysis in the state of Texas generally examines at two categories of crime, namely, violent crimes and property crimes. Violent crimes include murder, forcible rape, robbery, and aggravated assault. Property crimes consist of burglary, larceny-theft, and motor vehicle theft.

According to the 1994 Texas Crime Report, 12 % of the Crime Index (a statistical summary tool for crime rates) was made up of violent crimes, and 88 % were property crimes. The rate for the previous year (1993) was slightly lower for violent crimes (11.8%), but higher for property crimes (88.2%). However, because violent crimes involve the element of personal confrontation between the perpetrator and the victim, these forms of crime are considered to be more serious than property crimes.

An estimated 137,428 violent crimes occurred in Texas during 1993. The figure for 1994 was 129,842, a 5.5% decrease from 1993. The violent crime rate for 1993 was 762.1, and for 1994, it was 706.5 crimes per 100,000 Texans, a decrease of 7.3% from the previous year. Figures 2 and 3 illustrate the rates of violent crimes in Texas in 1993 and 1994, respectively.

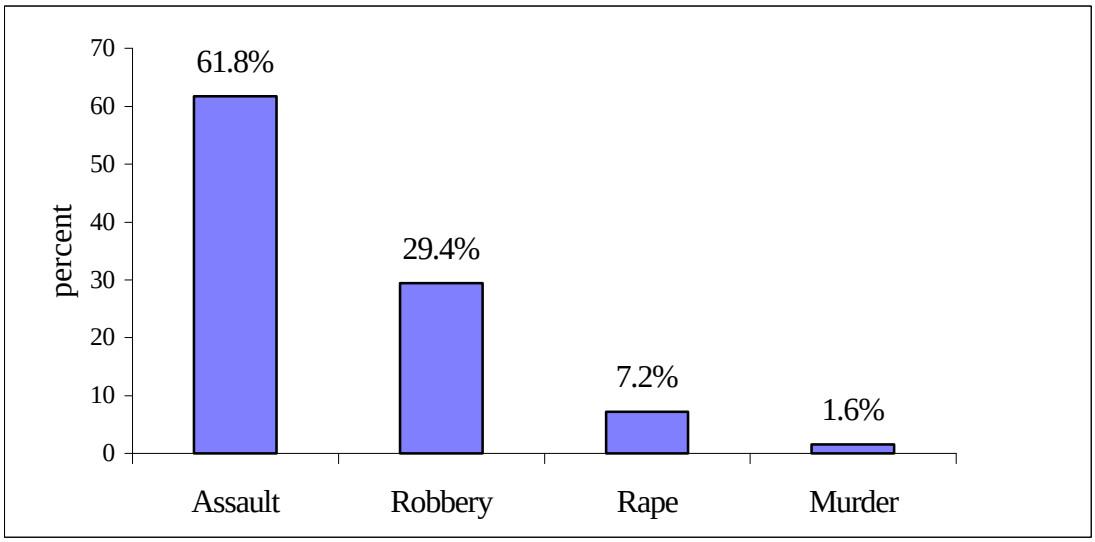

Figure 2. 1993 violent crime rate for Texas.

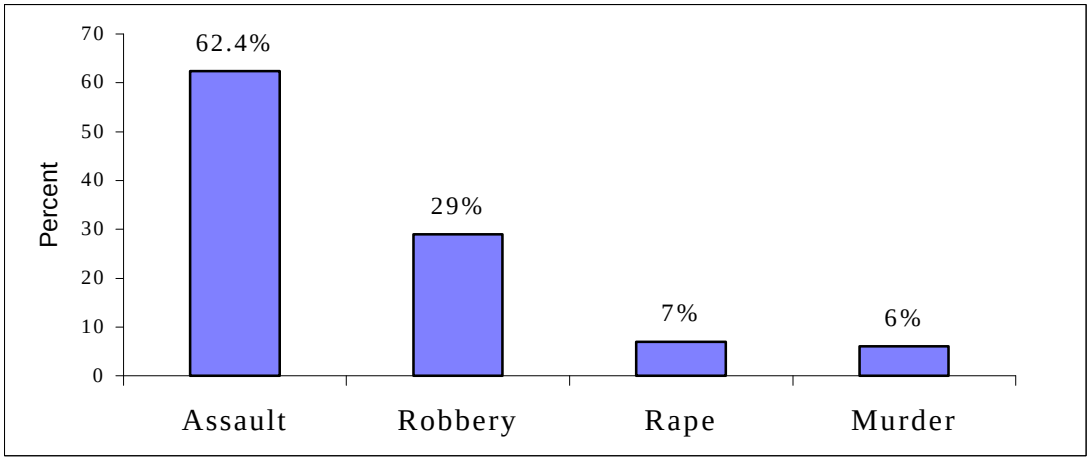

Figure 3. 1994 violent crime rate for Texas.

The city of Dallas, according to the 1993 Texas Crime Report, experienced a total of 317 cases of murder, 1,000 rape cases, 7,420 cases of robbery, and 9,439 cases of aggravated assault. The incidences of these crimes for 1994 were comparatively lower,with a total of 295 murder cases, 957 rape cases, 7,077 cases of robbery, and 8,557 cases of assault (Sakyi-Addo, 1996).

Membership in a gang often involves violent activity. Figure 4 illustrates the gang population in the city of Dallas in 1994. Adults are individuals over the age of 17, and juveniles are those between the ages of 12 and 17.

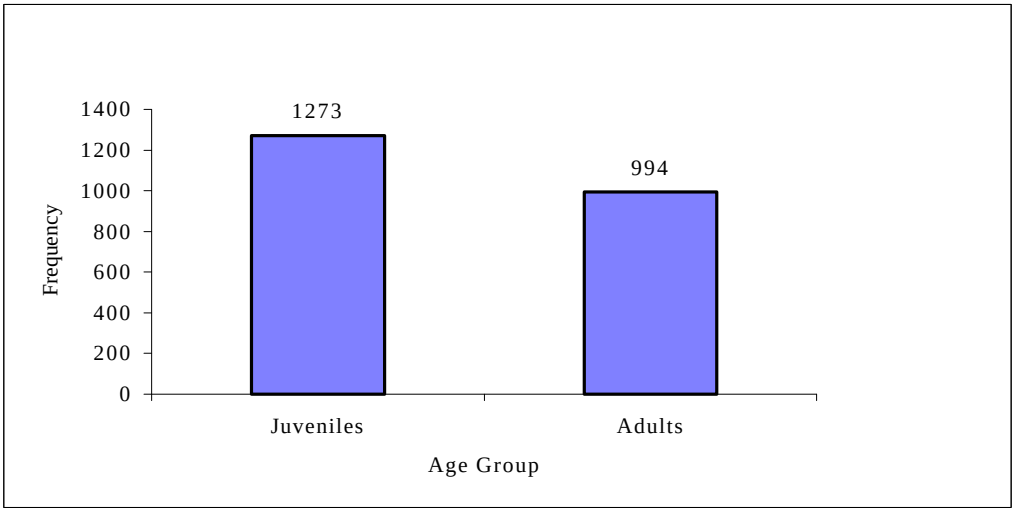

Figure 4. Gang Membership In Dallas (1994).

Arrest statistics for Dallas, shown in Figure 5, indicate 404 arrests of adults (age 17 and older) and 331 arrests of juveniles. Clearly, there were far fewer arrests than reports of crime (Sakyi-Addo, 1996) (see figure 5).

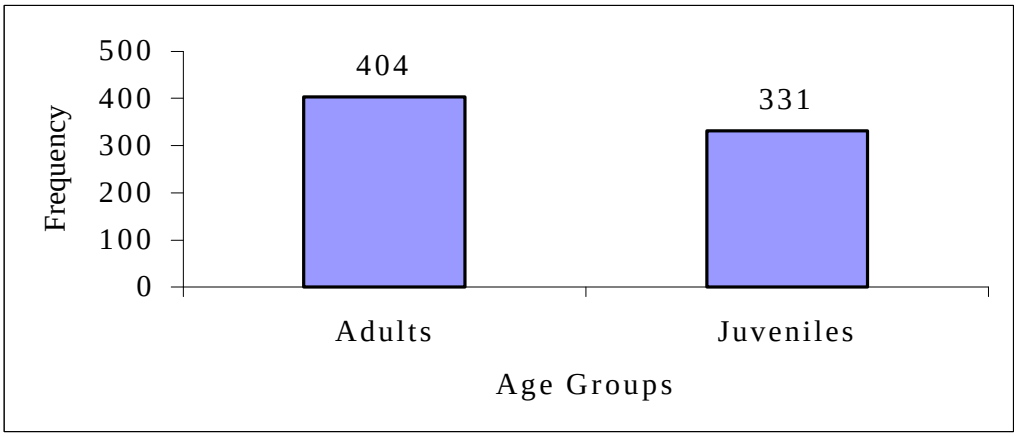

Figure 5. Arrests in Dallas (1994).

Objectives adopted by the U.S. Department of Health and Human Services (1990) to address violence include reductions in the homicide rate, in weapon-related deaths, in assault injuries, in physical fighting among youths, in weapon carrying by youths, increases in conflict resolution education in schools, and comprehensive violence prevention programs.

Many American schools and communities have developed innovative strategies in violence prevention programs. For example, the Centers for Disease Control (CDC) listed 138 community programs that are designed to prevent youth violence (Fenley et al., 1993). These programs address strategies of mentoring, conflict resolution, training in life and social skills, parenting, peer education, public information and education campaigns, legal and administrative strategies, therapeutic activities, recreational activities, work opportunities, and, modification of the physical environment. The CDC stressed that their list is incomplete, because it includes only those programs with which they have been involved or that have been reported to them by various organizations across the country. However, one crucial observation is that very few of the programs have been evaluated, and the CDC does not cite evaluation data from programs that may have been evaluated.

Statement of the Problem

The essential question addressed in this study is as follows: Can a curriculum that was designed for a specific age group be adapted for administration to a younger age cohort and maintain a positive outcome in learning experience? Additional questions concern what effects gender and grade level have on the learning experience and whether program participants will exhibit nonviolent behavior at some time several months after

their participation. This study was concerned with the applicability of a widely used violence prevention curriculum with an audience other than that for which it was initially developed.

Design of the Research

The data for this study were gathered by the instructors of the curriculum as pre- and postsurveys of students in the fifth, sixth, and seventh grades of targeted middle schools in a large southwestern metropolitan community. The students voluntarily completed the survey instruments. The curriculum was administered in the school years of 1994-1995, and 1995-1996.

The original survey instrument developed by the curriculum author and the adapted survey instrument administered to the younger students are included in appendices 1 through 4. The specific methodology of the data collection and the analysis are provided in later chapters.

Significance of the Study

Administration of a specific violence prevention curriculum to middle school-aged children may provide these children with essential skills to bolster their adaptability to the increasingly stressful society in which they will mature. The author of the curriculum drew an analogy to the U.S.'s anti-smoking campaigns, in which it has been demonstrated that early intervention is safer, preferable, and more cost-effective than the costs associated with tobacco and smoking related illnesses. If young people learn conflict-resolution skills and nonviolent methods of dealing with anger, the costlier programs to rehabilitate incarcerated violent offenders may be avoided (Prothrow-Stith & Weissman, 1991).

The effectiveness of providing violence prevention education to the middle school audience will have implications for education policy development and for education curriculum development. Issues of conflict can be addressed across all subjects in the public school curriculum.

Sociologists, criminal justice practitioners, and public health professionals will find application of the principles of the curriculum in their respective fields. Providing younger children with critical self-preservation skills may prove beneficial and yield a reduction of the morbidity and mortality rates due to the violence that has become increasingly more prevalent in U.S. society.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

Every school day 160,000 children fail to attend classes because they fear physical harm; 40 are hurt or killed by firearms; 6,250 teachers are threatened with bodily injury; and 260 teachers are physically assaulted (_____, 1999). A few years ago such statistics would have been greeted with a great deal of skepticism; however, the school shootings that have occurred recently have left no doubt about the escalation of violence in U.S. schools. Indeed, within a decade, the nature of violent acts committed by children has changed from the use of the fist, stick, and knife to that of the gun (Canada, 1995).

The history of America is one of violence. Honorable citizens and criminals alike have used violence and have rationalized its use for either founding and preserving the nation or for selfish gain (Graham & Gurr, 1979; Moulton, 1971). The American fascination with violence continues to be extensive, proliferating throughout the culture (Turpin & Kurtz, 1997) and may be found in the media, sports, politics, the military, churches and schools (Brendtro & Long, 1995; "Entertainment's Role," 1999; USDHHS, 1999).

The manifestation of violence through action toward another person or a group is evidence of learned behavior. Violence is not instinctive; rather, it results from the process of socialization and could be viewed as a cultural attribute (Moulton, 1971). Because socialization begins early, the learning begins early (Canada, 1995). Children raised in

violent households learn and incorporate into their behavior what they observe within their families (Palermo, 1994).

Consequences of Violence

The major consequences of violence include physical injury, psychological harm, monetary costs, mortality, and morbidity. Violence may be acute or chronic, occurring both in public places and the intimacy of the home (WHO, 1996). People suffer from the harm that results from the losses, illnesses, disabilities, and deaths in such preventable circumstances as workplace injuries and diseases; of environmental degradation; unsafe food, pharmaceuticals, and other products; of unnecessary surgery and incompetent emergency care; and corporate and government wrongdoing (Turpin & Kurtz, 1997).

In an economic sense, direct monetary costs result from physical injury; these costs include those for emergency care, continuing medical treatment, physicians'fees, medications, and rehabilitation. In 1987 the average medical costs per victim injury were estimated as $5,370 for murder, $616 for rape, $527 for assault, and $344 for robbery. The total measurable costs in 1987 were estimated at $2 billion for murder, $1.6 billion for rape, $10.1 billion for assault, and $6.3 billion for robbery (Reiss & Roth, 1994).

Indirect as well as direct costs may be attributed to the consequences of violence. Such indirect costs include those necessary for law enforcement, adjudication, victim services, and correctional facilities (Reiss & Roth, 1993). Lost production time and lost earnings are additional indirect costs. In the fiscal year 1982, federal, state and local governments spent $94 billion for civil and criminal justice. This represented an increase of 59% over expenditures in these areas for 1987 (Bureau of Justice Statistics, 1997).

The consequences of violent behavior also include nonmonetary factors, such as the disruption of families; the disintegration of neighborhoods, particularly in the inner city; the fortification of schools, homes, and businesses; and the deterioration and abandonment of community resources (Reiss & Roth, 1993).

Violence Defined

The concept of violence defies a straightforward, concrete definition, but is terminology critical for operationalization and the development of strategies for prevention and control (WHO, 1996). Definitions of violence invariably indicate the use of force or maintenance of power as a critical factor and describe a myriad of destructive personality traits and antisocial behaviors. Used interchangeably with aggression, violence refers to a physical act, whereas aggression refers to any malevolent act that is intended to hurt another person. The damage may be physical and/or may include emotional injury or material deprivation (Gelles, 1993). In his study of patterns of parent-to-child violence, Gelles defined violence as "an act carried out with the intention, or perceived intention, of physically injuring another person" (Gelles, 1978). The implication exists that violence is a force that is inflicted on someone which usually results in some physical violation (Twitchell, 1989).

According to Moulton (1971), violence is the ultimate means by which those who wield political and economic power maintain it. Siann (as cited in Sigler, 1995) discussed the use of great physical force or intensity in his discourse on violence. Although physical force is often spurred by aggressive motivation, aggression does not necessarily involve

physical injury; rather, aggression involves the intention to hurt or to emerge superior to others and may have a variety of motives (Sigler, 1995).

Palermo (1994) defined aggression as having two origins. He suggested that primary aggression is a goal-direct, hostile self-assertion and that it is destructive in character. In contrast, reactive aggression results from an emotional reaction brought about by frustrating life experiences. The violence in our society represents these two types of aggression (Palermo, 1994).

Perhaps the most illuminating definition of violence is one that encompasses the ideas of force and aggression. Violence is the threatened or actual use of physical force or power against another person, against oneself, or against a group or community (Mercy, 1995). It either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation (WHO, 1996).

Prevention Defined

Generally, in the healthcare arena, prevention is viewed as a primary intervention activity to promote health and well-being, leading to an avoidance or minimization of morbidity and mortality. The review of current literature yielded a paucity of detail on the topic of prevention and failed to provide a specific definition. Bloom's (1981) extensive review of early health and social science literature led him to formulate this definition:

> "Prevention involves activities directed toward obviating potentially harmful configurations of bio-social-physical events and simultaneously promoting beneficial configurations in any identifiable population/person at risk or with potential who is currently functioning in an adequate manner, using whatever

theories, strategies, and techniques are feasible, ethical, and demonstrably efficacious by means of concomitant evaluation" (Bloom, 1981).

Bloom's (1981) definition permits the operationalization of research issues that address the concept of violence. Prothrow-Stith reviewed the success of smoking cessation programs to argue for the implementation of violence prevention programs. The numbers of injuries and deaths among children as the result of violent actions led to the development of her violence prevention curriculum (Prothrow-Stith & Weissman, 1991).

Community Coalition

In their Framework for Community Action publication on the prevention of youth violence, the Centers for Disease Control and Prevention noted that effective community programs must include activities that are appropriate for the community and the problem and that it is essential to create the organization that will effectively carry out the activities (Fenley et al., 1993). In August 1994, the Mental Health Association (MHA) in a large southwestern metropolitan city presented the violence prevention curriculum to a group of inner city youth participants in a summer education program. In an effort to expand its presentation of the curriculum to a greater number of the city's young people, the MHA formed a coalition with the Community of Churches (CC) organization in its city in the fall of 1994. The CC had the manpower resources, with their AmeriCorps members, to present the curriculum to the inner city schools in the neighborhoods in which they had established community programs. The MHA provided the AmeriCorps members with curriculum instruction and supervision for the administration of the violence prevention program.

Of particular concern to the CC was the measuring of the effectiveness of the violence prevention curriculum. Did the students improve their knowledge of violence prevention? Did the students change their behavior after participating in the violence prevention program? Did the students change their attitudes toward violence after participating in the program? The curriculum included the administration of a pre- and postprogram survey to the students. The results of these surveys were intended to measure a change in knowledge, attitude and behavior as reported by the students. However, an inherent flaw exists in the expectation that self-reports of knowledge, attitude, and behavior will indeed reflect demonstrated change in attitude and behavior. It is a well-known research phenomenon that respondents may answer surveys in socially acceptable ways or provide answers that they believe the researcher wants (Babbie, 1991). Further, the student postcurriculum surveys are administered immediately following the conclusion of the instruction without further follow-up at a later date. Can this particular violence prevention program accurately be deemed effective with only the self-reports of the students as documentation of effectiveness?

The Prothrow-Stith Curriculum

The MHA purchased the Deborah Prothrow-Stith program for violence prevention. Prothrow-Stith, a pediatrician teaching in the Harvard School of Public Health, developed the curriculum for high school students, ages 15 and 16, out of her frustration with the medical profession's inadequate response to treating people with violence-related injuries. She observed intervention efforts with emergency department

patients who presented as attempted suicides but found no protocol for intervention with a person who threatened to commit another violent act (Prothrow-Stith, 1994).

Prothrow-Stith (1994) felt that public health strategies to prevent violence would lend the appropriate structure for development of a violence prevention curriculum. Typically, public health efforts follow a three-pronged approach. First, they examine at changing attitudes toward the problem; then help people modify unhealthy behaviors; and, finally, reach out with treatment options. In writing about the development of her violence prevention curriculum, Prothrow-Stith drew an analogy to the U.S.ś anti-smoking campaigns. In violence prevention, as in lung cancer prevention, early intervention is safer, preferable, and more cost-effective than if young people learn conflict-resolution skills and nonviolent methods of dealing with anger, the costlier programs to rehabilitate incarcerated violent offenders may be avoided. Prothrow-Stith designed the violence prevention curriculum to raise adolescents'threshold for violence by creating a nonviolent ethos within the classroom. Her intention was to help students develop alternatives to violent expressions of anger through acknowledgment of their anger and the development of creative responses to it.

Curriculum Evaluation

Increasing evidence suggests that successful efforts to curb violent behavior should begin early in a childś life (Buka & Earls, 1993). The past few years have seen a proliferation in violence prevention curriculum development, peer mediation programs, and peer court programs for school-based violence prevention programs. The National Association for Mediation in Education reported a 40 % increase since 1991 in school

programs that teach their students conflict resolution (Shepherd, 1994). Such programs are, for the most part, directed toward adolescents, particularly those in junior high schools and high schools. Few programs have been developed and presented to students in elementary and middle schools.

Clearly a need exists for an evaluation of those programs that have been "borrowed" from junior high schools and high schools to assess their appropriateness and effectiveness with students in elementary and middle schools. An evaluation of such programs is essential, not only to learn of the knowledge, attitude, and behavioral changes for the students, but also to determine the age appropriateness of the curriculum materials that are in use.

Evaluation of the effectiveness of the Prothrow-Stith violence prevention curriculum will (a) demonstrate the appropriateness of the curriculum as it is being administered in middle schools; (b) illustrate observed behavior of the students; and (c) provide insight into the application of the adapted curriculum. The program evaluation will permit justification of continued administration of the violence prevention curriculum, or it will demonstrate a need for substitution of other programs or reallocation of the resources represented by the AmeriCorps members as they function in this community activity.

CHAPTER 3

THEORETICAL FRAMEWORK

Introduction

This chapter will present a theoretical explanation of violence from a conflict orientation. This offers a perspective, from micro through macro, of the level of intensity of insult to an individual, or against a group or community, or nation.

Violent Conflict

Conflicts may range from a dispute between individuals, such as a landlord and tenant, to a large military confrontation where vast armies battle (Fraser & Hipel, 1984). When conflict cannot be resolved peacefully or when it is used to control, the party affected may be considered as being influenced violently.

Johan Galtung developed the concept of "structural violence" to account for the violence that occurs when people are harmed because of inequitable social arrangements rather than by overt physical violence (Turpin & Kurtz, 1997). Public health researchers examine such consequences of structural violence as unequal development, racism, food policy, nutrition, sanitation, and health care (Prothrow-Stith & Weissman, 1991) as cited in (Turpin & Kurtz, 1997).

Risk Factors

While not a direct determinant of violence, poverty is often cited as an underlying factor. Urbanization, family disintegration and social stress are other common factors. "Although it is widely accepted today that there is no single direct relationship between poverty and violence, a close association does indeed exist between inequity and violence.

It is not that poor people are intrinsically more violent than other members of society, but, rather, that the inequities they suffer, combined with the disempowerment, fear, insecurity, frustration and depression these cause, are contributing factors to violence behaviours" (WHO contribution to the World Summit for Social Development, Copenhagen 1995) (WHO, 1996).

Media portrayals of violence; access to alcohol and other drugs; children's unsupervised access to firearms; absence of adult male role models; individual and family mental health factors such as a low sense of self-worth and control; and, instability, neglect, or inadequate supervision are all contributors to increasing risk for violence. Inner city youth are particularly vulnerable to personal victimization through exposure to and witnessing acts of violence (_____, 1999).

The most encompassing definition of violence in the previous chapter stated that violence is the threatened or actual use of physical force or power against another person, against oneself, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation (WHO, 1996). If violence were plotted on a continuum with psychological harm anchoring one end, movement along the continuum toward the ultimate violent insult, death, would illustrate a progression in the intensity of the insult from the invisible through the most highly visible.

Figure 6

Continuum Of Intensity Of Insult

Risk factors apply at the micro level of the individual and family; the meso level of the neighborhood and community; and, at the macro level of the larger environment as perceived at the national and global level.

Protective Factors

When confronted by adverse situations some individuals and groups are able to react positively and to adapt whereas the maladaptive behavior of others illustrates their inability to recover from trauma. The presence of parents or caring adults is crucial for the adaptation and even the survival of children placed in extreme conditions: physical and mental disturbances and mortality rates are much higher in war, displacement and refugee camps, for unaccompanied children. The capacity of a child, an individual, a family, or a group not only to resist adverse and negative events but also to build up a strong and empathic personality or behavior may be viewed as resiliency (WHO, 1996).

Resilience is the ability to get through, get over and thrive after trauma, trials and tribulations, to be challenged and not break down (Guttman, 1999). Qualities that make a person resilient have been identified by such researchers as Emmy E. Werner of the University of California at Davis. One of the most important attributes is the ability to be and feel connected to others (Werner, as cited in Guttman, 1999). Also, the importance of elder mentors is significant.

AmeriCorps Members live and work in their neighborhoods, thus increasing the time they interact on both a personal and professional level with their fellow residents. By utilizing AmeriCorps Members to administer the violence prevention curriculum, their influence through interaction with the children in their neighborhoods is enhanced. For

some children an AmeriCorps Member may be the significant elder person in the children's lives who fosters the quality of resilience.

Key protective factors for violence include organized community programs for youth and families; access to high-quality schools, committed school personnel, and a school environment that promotes violence prevention. Mentors and role models; effective communication and problem solving skills within the family; and, a sense of self worth and good self esteem are also cited as key protective factors (_____, 1999).

Evaluation of an Adaptation of a High School Curriculum

The Prothrow-Stith curriculum was designed for high school aged students. The program provides statistical information on adolescent violence and homicide; present anger as a normal, potentially constructive emotion; create an awareness in students for alternatives to fighting by discussing the potential gains and losses from fighting; have students analyze situations preceding a fight and practice avoiding fights by using role plays and videotape; and, create a classroom ethos which is non-violent and values violence prevention. The concepts that form the foundation of this curriculum are applicable to all ages. An adaptation in materials, reading level and administration should not adversely effect the outcome of program participation.

The essential question addressed in this study is: is the curriculum effective? Can a curriculum that was designed for a specific age group be adapted for administration to a younger age cohort and maintain a positive outcome in learning experience?

Additional questions are: what effect does gender and grade level have on the learning experience and will there be observations of non-violent behavior exhibited by

program participants? This study is concerned with the applicability of a widely used violence prevention curriculum with an audience other than that for which it was initially developed.

There are two phases of the assessment of effectiveness of the adapted curriculum. The first phase is an outcome evaluation that examines the knowledge level, attitudinal predisposition toward violence and behavioral predisposition toward violence through a comparison of pre and posttests completed by the program participants. The second phase of the assessment presents a process evaluation based on surveys completed by the curriculum instructors, the classroom teachers who were observers, and program participants.

Variables

The dependent variable is the program effectiveness. Control variables are the school, grade level, age and sex of the participants. The schools were matched to ensure that the data being examined showed participation in the same grades and in both the pretests and posttests.

Hypotheses

The following hypotheses were developed in anticipation of the characteristics of the data. The hypotheses are written as research hypotheses with the exception of hypothesis 4 which is written as a null hypothesis.

Hypothesis 1: Students who participate in violence prevention training will show an increase in factual knowledge about violence from pretest to posttest.

Hypothesis 2: Students who participate in violence prevention training will show a decrease in reported attitudinal predisposition to engage in violence from pretest to posttest.

Hypothesis 3: Students who participate in violence prevention training will show a decrease in reported behavioral predisposition to engage in violence from pretest to posttest.

Hypothesis 4: The schools will not vary one from another.

Hypothesis 5a: As grade level increases, general knowledge will increase from pretest to posttest.

Hypothesis 5b: As grade level increases, attitudinal predisposition to violence will decrease from pretest to posttest.

Hypothesis 5c: As grade level increases, reported behavioral predisposition to violence will decrease from pretest to posttest.

Hypothesis 6a: As age increases, general knowledge will increase from pretest to posttest.

Hypothesis 6b: As age increases, attitudinal predisposition to violence will decrease from pretest to posttest.

Hypothesis 6c: As age increases, reported behavioral predisposition to violence will decrease from pretest to posttest.

Hypothesis 7a: Females will show more general knowledge than males will on both the pretest and the posttest.

Hypothesis 7b: Females will show less attitudinal predisposition toward violence than males will on both the pretest and the posttest.

Hypothesis 7c: Females will show less behavioral predisposition toward violence than males will on both the pretest and the posttest.

Summary

This chapter focuses on the theoretical framework that guided this research. The underlying concepts of the violence prevention curriculum and the major hypothetical propositions that were tested are presented.

CHAPTER 4

METHODOLOGY

Introduction

Evaluation research is undertaken to assess the effectiveness of social programs; to critique and improve them; and, to rationalize the continuation of the investment of capital and labor in perpetuating the endeavor (Rossi & Freeman, 1993). This section will focus on the research methodology pertinent to the evaluation of a violence prevention curriculum. Specifically, the issue is that of assessing the impact of the administration of the curriculum on students knowledge, attitudinal predisposition toward violence and behavioral predisposition toward violence. The importance of impact assessment is the demonstration that observed changes are a function of the intervention and do not stem from other influences (Rossi & Freeman, 1993).

Internship

During the summer of 1995, I served as an intern with the Greater Dallas Injury Prevention Center (GDIPC). The GDIPC provides services and resources to promote the health and safety of citizens of the greater Dallas area. They were approached by the Greater Dallas Community of Churches (CC) for assistance with an evaluation of the Prothrow-Stith violence prevention curriculum. It was their intention to administer the curriculum in middle schools in the neighborhoods where they were establishing programs utilizing AmeriCorps members.

The CC had secured the services of the program coordinator and the program materials from the Greater Dallas Mental Health Association (MHA). The MHA had made

an adaptation of the original pre and posttest instruments from those provided by the curriculum author. Their adaptation consisted of rewriting the instruments to include only those sections that offered statements that would determine the general knowledge, attitudinal predisposition toward violence and behavioral predisposition toward violence.

After an initial review of the instruments I determined that they contained a highly sophistication level of language. I conducted a reading appraisal of the documents using the Flesch-Kincaid analysis of readability. This test of readability assesses the level of reading ability that would be required to comprehend the concepts and terminology employed in the statements. The assessment is based on the number of syllables in a word and the number of words in a sentence (Flesch, 1974). The reading level was assessed at the twelfth grade reading level. Subsequently I adapted the instruments to maintain the concepts with terminology more appropriate to a seventh grade reading level. A follow-up Flesch-Kincaid analysis of readability confirmed the adaptation of the pre and posttest at a seventh grade level of reading comprehension.

Further, the statements in the section of the original pre and posttest instrument that deal with situations to determine a behavioral predisposition to violence were written with the masculine name Neil and the pronoun he. I rewrote these statements using the gender-neutral name of Lee and offered a choice of she/he for the pronoun. The intent was that the reader would identify with the situation within their frame of reference and not react to the name or gender implication of the situation as pertaining to males.

Research Model

Because of the purposive nature of an impact assessment, this study necessitates a non-randomized quasi-experimental approach. Figure 7 is the model of the research design I have employed. This model represents a one group, pretest/posttest quasi-experimental design (O_1 X O_2) (Campbell & Stanley, 1973).

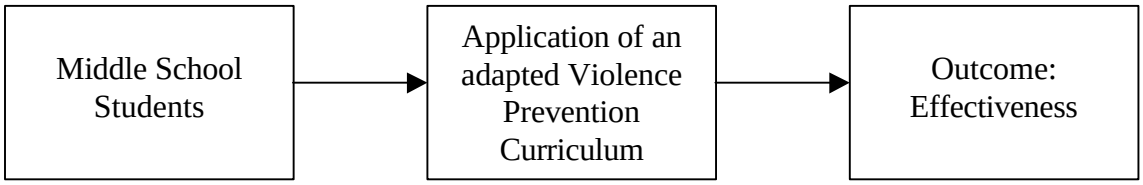

Figure 7. Research model illustrating pretest group, intervention and posttest.

With this type of experimental design recognition must be accorded to sources of internal and external invalidity. Internal validity refers to an ability to correctly conclude that the independent variable (the violence prevention curriculum) was responsible for the observed variation in the dependent variable (program effectiveness as assessed by changes in knowledge, attitudinal predisposition toward violence and behavioral predisposition toward violence). The major threats to internal validity are history, maturation, testing, instrumentation, statistical regression, selection bias, experimental mortality, and selection-maturation interaction. The major threats to external validity are the reactive or interaction effect of testing; the interaction effects of selection biases and the experimental variable; reactive effects of experimental arrangements; and multiple treatment interference (Campbell & Stanley, 1973).

The first threat to internal validity is that of history. The normal procedure that alleviates the concern for history is the use of a control group in an experimental design.

The control group is matched to the experimental group on essential characteristics such as age, gender, and grade. The experimental group receives the intervention and the control group participates in the pre and posttest without receiving the intervention. With this quasi-experiment a control group is simulated through the comparison of each of the schools, one to another, by grade. Each grade in each school is analyzed. The results are summarized in Appendix 6.

Another facet of the history threat to interval validity is that of time lapse. There was a considerable lapse from the start of the curriculum until the conclusion: generally, a period of ten weeks. There could be any number of alternate learning experiences (external to the classroom experience) that focus attention on the necessity for violence prevention and that influence the measured outcome. The final results may not be solely attributed to the program under study. An example of such an event would be the news broadcast of a school hostage situation or the shooting death of a classmate. With this quasi-experiment a control group is simulated through the comparison of each of the schools, one to another, by grade.

The second concern of influence on internal validity is that of maturation. Students grow physiologically, psychologically and intellectually as a function of aging and engagement in a learning environment. The possibility exists that the outcome may be different merely because of the process of aging.

Testing as a threat to internal validity refers to the effect of taking a test. Those responding may answer according to their perception of how everyone else may be answering; they may arbitrarily choose all true or all choice "b"; or, they may answer in a

manner that reflects their perception of what the instructor expects or what is socially acceptable. When using the same instrument for the pre and posttest there may be an influence on the posttest answers as an artifact of exposure to the same statements on the pretest.

The fourth concern for internal validity is that of instrumentation. This threat recognizes the possibility of changes in the result being a function of a changing perception in the observer or in the test scorer that could result in variation in the measurements or results obtained. In this study the results were obtained from student responses on a pre and posttest and analyzed using statistical software. There was no third party either recording data or summarizing data.

Statistical regression as a threat to internal validity generally occurs when subjects to receive an intervention are selected on the basis of their extreme results in some assessment measure. The pre and posttest scores may regress toward the mean and could result in interpretations of the data that reflect a decline in the scores of good students and improvement in scores of poor students due to either under or over stimulation respectively rather than reflect the intervention. In this study all students in a class participated and the instruments are capturing inherent knowledge, attitude and behavioral data about violence and not scoring the cognitive skills of the students.

The sixth concern for internal validity is that of selection. Normally selection bias is managed by random assignment into the experimental and control groups. In this study all students in a classroom participated in the pre and posttests and are used as their own control.

Comparison across groups necessitates the ensuring the homogeneity of participants before the administration of the curriculum. This aspect of selection bias may be alleviated through the uniformity of socio-economic characteristics inherent to the inner-city region and through the choice of the same grade levels in each school. Also, the student populations in the schools and grades within the schools were diverse in race and ethnicity as befitting the population matrix in inner-city neighborhoods.

Schools in inner-city neighborhoods with AmeriCorps members were targeted to participate in the program. On an individual level, while participation was voluntary, there may have been a possible self-selection bias owing to recognition of the instructor, particularly if students had positive interaction with the instructor in neighborhood activities. A negative type of selection bias may be also be a possibility. A student may be a reluctant participant by virtue of peer pressure to participate.

With experimental mortality the threat to internal validity lies with the inability of the researcher to ensure that there is a true case by case match of subjects throughout the duration of the study and that subjects aren't lost during the period of the study. With this post-hoc analysis of data there is no assurance that the same students participated in the pretest, received the violence prevention curriculum and also participated in the posttest. This is especially a concern with this study as some students took the pretest, participated in the curriculum and completed the posttest survey rather than the posttest instrument.

The final threat to internal validity discussed by Campbell and Stanley is that of selection-maturation interaction. This may occur when an experimental group shows a gain on postintervention that may have happened spontaneously and not necessarily as a

result of the intervention. Such an interaction is controlled for in this study through the examination of the results across different schools but with the same grades and ages of the participating students. There should not be significant differences between schools.

External validity refers to the generalizability of the findings to other settings and subjects. Campbell and Stanley discuss four threats to external validity. The first is that of students' reactivity to the test taking process. The posttest results may be a function of memory as students often score higher on a second test particularly when the test instrument is used for both pre and posttest assessments (Campbell & Stanley, 1973). The second is the interaction effects of selection biases and the intervention variable. The judicious selection of schools in similar neighborhoods in the inner-city region and the comparison of the same grade levels control such effects in this study across the schools.

Thirdly, reactive effects of experimental arrangements would hinder generalizability about the effect of the intervention to others that may have received the intervention in non-experimental settings. The fourth threat to external validity is multiple treatment interference when the same participants in the study receive multiple treatments. The effects of prior treatments linger, they are not usually forgotten or erased. In this study there is only one treatment or intervention, that of the administration of the violence prevention curriculum.

Data Collection

Subsequent to the period of my internship with the Greater Dallas Injury Prevention Center I maintained contact with the Greater Dallas Community of Churches. In June of 1996 I requested and was granted access to the data that was being collected by

the AmeriCorps members when they administered the violence prevention curriculum. The data for this study was gathered by the instructors of the curriculum as pretests and posttests completed by students in selected middle schools in a large southwestern metropolitan community. The students voluntarily completed the survey instruments. The curriculum was administered in each of the school years of 1994 - 1995, and 1995 - 1996. The instructors also voluntarily completed an assessment questionnaire that solicited their opinion of the materials with which they worked. The classroom teachers, who were present in the classroom as observers during the administration of the violence prevention curriculum, also voluntarily completed an assessment of the program materials as well as shared their observations of the behavior of their students after the curriculum presentation.

The curriculum could be viewed as effective if the students'self reports indicate positive change in knowledge, attitudinal predisposition toward violence and behavioral predisposition toward violence; and, if their teachers report a decrease in conflicts during and after the administration of the curriculum.

Data Analysis

The Statistical Program for the Social Sciences (SPSS) is the data analysis tool to describe and summarize the acquired data (Norusis, 1995). Descriptive statistics will yield the total number of student, teacher/observer and instructor participants. Effectiveness of the program will be determined by comparison of the students'results on the posttest instrument to the pretest results.

Technique of Data Analysis

The data for the pretests and posttests were prepared initially by matching the participating schools on a participation variable, "matched schools pre & post", which was coded "1" for pretest and "2" for posttest. This yielded two schools with participation from students in grades 7 and 8 for the school years ending in 1995 and 1996 (n = 1891). There were 686 7^{th} grade students who participated in the pretest and 203 who participated in the posttest. There were 589 8^{th} grade students who participated in the pretest and 313 who participated in the posttest. In both instances the number participating in the posttest reflects the variability in the collection of posttest data on the part of the AmeriCorps instructors. There were a total of 1007 students who completed postprogram surveys instead of posttest instruments.

The t test for comparison of means between groups, the pretest and the posttest groups, was conducted to determine differences. Preparing the pretest and posttest data for t test analysis required factor analysis to assess the responses to the various statements in each of the three sections (knowledge, attitude and behavior) on the test document. Factor analysis is a data reduction technique that represents a set of variables in terms of a smaller number of hypothetical variables. Factor analysis is an expedient method of determining the minimum number of hypothetical factors that can account for an observed covariation among the variables examined (Kim & Mueller, 1978). This analysis resulted in the creation of indices in each of the three sections: knowledge, attitude and behavior.

Summary

This section detailed the research methodology pertinent to the evaluation of a violence prevention curriculum. The threats to internal and external validity were discussed and the technique of data preparation and data analysis was documented.

CHAPTER 5

DATA ANALYSIS AND DISCUSSION OF FINDINGS

Introduction

This chapter is a discussion of the data analysis procedures and the tests of research hypotheses. Each hypothesis is examined and a discussion of the findings will be presented. The acceptance or rejection of each hypothesis will be detailed. Comparison with results found by other researchers will be included.

Outcome Evaluation: Comparison of Pretests and Posttests

The total number of pretest and posttest documents available for examination was 2854. When the characteristics of the data were examined, those students who participated in the posttest but not in the pretest were excluded as there was no certainty that they had participated in the complete program. Also, schools that conducted posttests but not pretests were excluded because there was no certainty that they had participated in the complete program. The total number of cases included in the data analysis was 1891. This was based on those schools and grades that completed both the pretest and the posttest. Table 1 provides an overview of the frequency distributions for the schools, grades and ages of the participants.

Table 1

Participation by School, Grade and Age of Students

School	Grade		Age*	Pretest	Posttest	Total
Middle #8	7th Grade		13	175	64	239
			14	95	55	150
			15	11	6	17
		Total		281	125	406
	8th Grade		13	46	1	47
			14	118	21	139
			15	77	21	98
		Total		241	43	284
Middle #10	7th Grade		13	54	41	95
			14	65	48	113
			15	20	16	36
		Total		139	105	244
	8th Grade		13	67		67
			14	76	78	154
			15	24	99	123
		Total		167	177	344

*Missing data: 613

From Table 1, the participants in the program represent two grades in two middle schools. Middle School #8 had 856 students participate in the pretest and 246 in the posttest. Middle School #10 had 419 participants in the pretest and 370 in the posttest. Within these schools there were a total of 686 7th grade students who participated in the pretest and 303 in the posttest. Eighth grade students totaled 589 who participated in the pretest and 313 in the posttest. By combining the data from all schools the threats to internal validity that are inherent with the experimental design may be alleviated.

Findings

Based on the research model (O_1 X O_2), Figure 8 shows the application of the violence prevention curriculum to the specific schools and grades included in the study.

School	Pretest (O_1)	Violence Prevention Curriculum (X)	Posttest (O_2)
Middle School #8 Grade 7	Pretest 8,7	X	Posttest 8,7
Middle School #10 Grade 7	Pretest 10,7	X	Posttest 10,7
Middle School #8 Grade 8	Pretest 8,8	X	Posttest 8,8
Middle School #10 Grade 8	Pretest 10,8	X	Posttest 10,8

Figure 8. Research Model with Schools and Grades.

Factor Analysis

Factor analysis was employed to determine covariation among the statements pertaining to knowledge and attitudinal predisposition toward violence and test to determine how many dimensions of knowledge and attitude existed in the data. Table 2 is the component matrix of the knowledge-based statements that resulted from the factor analysis of those statements. These statements explored the general knowledge of the respondents on topics pertaining to violence. These items were coded "1" for a correct response and "0" for an incorrect response.

Factor analysis indicated three major dimensions in the general knowledge section of the pretest. The pertinent factors were selected if the factor component score was equal to or greater than .4 on one factor and equal to or less than .2 on another factor. Table 2 shows the results of the factor analysis with the three major factor components. The statements were then examined to determine what was being measured conceptually. This resulted in the responses to the statements being summed into three indexes based on the underlying concepts.

Table 2

Factor Analysis: Knowledge Statements

Statement	Factor 1	Factor 2	Factor 3
1. Alcohol can make people fight.	.161	.178	.656*
2. Blacks kill whites more often than blacks kill blacks.	.651*	-.106	.173
3. More people are killed during an argument than for any other reason.	-.004	.251	.360
4. The most frequent cause of death for people ages 15 to 24 is sickness.	.424*	.349	-.159
5. The most frequent cause of death for black males ages 15 to 24 is murder.	.005	.677*	.110
6. The weapon used most in a murder is a knife.	.597*	.260	-.177
7. In most murders, the killer and victim know each other.	-.002	.482*	-.003
8. Half of all murder victims had been drinking alcohol.	-.159	-.134	.678*
9. More women than men are murder victims.	.602*	-.006	.130
10. More people are hurt or killed by their own gun than use it for protection.	-.006	.616*	.006
11. Men commit more murders than women.	-.005	.131	.171
12. Drinking beer isn't bad for you like drinking hard liquor (whiskey, vodka, or gin).	.003	.001	-.006
13. Most murders happen because of fights between two different races.	.528*	-.009	-.243
14. Crime victims who are carrying a weapon are more likely to be killed than crime victims who are not carrying a weapon.	-.008	.172	.272
15. A poor neighborhood that is mostly white will have about the same murder rate as a poor neighborhood that is mostly black.	-.131	.004	.176

Extraction Method: Principal Component Analysis.
*Denotes those factors that were kept.

Knowledge Determinant

In the first index statements 2, 4, 6, 9 and 13 were combined into the variable "factual knowledge index" to reflect a common element of facts about violence in the statement. In the second index statements 5, 7, and 11 were combined into the variable "murder knowledge index" to reflect the common element of murder in the statement. In

the third index items 1, and 8 were combined into the variable "alcohol knowledge index" to reflect a common element of alcohol in the statement. Table 3 represents the frequency distribution of the summed responses for each of the three indexes.

Table 3

Frequency Distribution: Summed Responses for Knowledge Indexes

		Factual Knowledge Index	Murder Knowledge Index	Alcohol Knowledge Index
Response frequency:		1725	1775	1821
Missing data:		166	116	70
Score: 0		31	63	133
1		77	252	795
2		190	638	893
3		320	822	
4		491		
5		616		
Mean		3.75	2.25	1.42
Median		4.00	2.00	1.00
Mode		5	3	2
Std. Deviation		1.27	.83	.62
Range		5	3	2
Minimum		0	0	0
Maximum		5	3	2
Percentiles:	25	3.00	2.00	1.00
	50	4.00	2.00	1.00
	75	5.00	3.00	2.00

Included in the murder knowledge index were the responses from 1725 students. The sum of the selected statements yielded six possibilities: 0, 1, 2, 3, 4 or 5 as a result of summing the five statements. The mean response sum is 3.75, the median is 4 and 5 is the mode.

The murder knowledge index was created from summing the responses from 1775 students. There were a total of 4 possible sums: 0, 1, 2 and 3. The mean response sum is 2.25; the median is 2 and 3 is the mode.

The alcohol knowledge index was created from summing the responses from 1821 students. There were a total of 3 possible sums: 0, 1, and 2. The mean response sum is 1.42; the median is 1 and the mode is 2.

Attitude Determinant

The second index was derived from the factor analysis of the 21 statements dealing with the attitudinal predisposition toward violence. The factor analysis shows that the responses actually point to a response bias. Negatively worded statements factored on one factor and positively worded statements factored on another. This result may be indicative of "agreement" bias with the low income, minority characteristics of the participants. Therefore, two indexes were created, one to reflect the negatively worded statements in one index and the positively worded statements in a second.

Table 4 is the matrix of statements 16 through 36 that resulted from the factor analysis of the attitude statements. These statements explored the attitudinal predisposition of the respondents to violence. When the items were positively worded statements they were coded 1 for a response of really disagree; 2 for a response of disagree; 3 for a response of agree; and, 4 for a response of really agree. The responses for selected positively worded statements were summed and used in the creation of the positive attitude index.

When the items were negatively worded statements they were coded 4 for a response of really disagree; 3 for a response of disagree; 2 for a response of agree; and, 1

for a response of really agree. The responses for selected negatively worded statements were summed and used in the creation of the negative attitude index.

Table 4

Factor Analysis: Attitude Statements

Statement	Factor 1	Factor 2
1. If I'm challenged, I'm going to fight.	.174	.291
2. If I walked away from a fight, I'd be a coward.	.009	.291
3. Getting angry is a normal part of life.	.234	.109
4. I can stay out of fights.	.405*	.394
5. Once a fight starts, there's no way to stop it.	.008	.710*
6. If a girl sees someone flirting with her boyfriend, she should fight with her.	.129	.534*
7. If someone hits me first, I'm going to hit back.	.004	.193
8. If I do what my parents tell me, I'll stay out of fights.	.518*	.007
9. If someone calls my mother a bad name, I would have to fight.	.008	.441*
10. If someone steals from me, the best way to handle it is to beat up the person.	.279	.306
11. If someone called me a bad name, I would ignore them or walk away.	.493*	.005
12. If I was in a fight, I'd feel safer if I had a knife.	.175	.008
13. People should always avoid fighting.	.557*	-.007
14. Anyone who avoids fighting is going to get picked on.	-.125	.005
15. I don't need to fight because there are other ways to deal with anger.	.683*	.199
16. If I mind my own business I can stay out of fights.	.662*	.001
17. When you're really angry, there's no way you can control yourself.	.003	.592*
18. There is never a good reason for hitting anyone.	.471*	-.128
19. I can learn how to stay out of a fight.	.672*	.253
20. When you are so mad that you want to hurt someone, it's always best to find another way to handle your anger.	.654*	.207
21. When I get into a fight, it is my own fault.	.380	-.003

Extraction Method: Principal Component Analysis.
*Denotes those factors that were kept.

The items noted above were combined into two indexes. In the first index, statements 4, 8, 11, 13, 15, 16, 18, 19, and 20 were combined into the index, positive attitude, to reflect the common element of a positive attitudinal predisposition toward

violence. In the second index, statements 5, 6, 9, and 17 were combined into the index, negative attitude, to reflect the common element of a negative attitudinal predisposition toward violence. Table 5 represents the frequency distribution and descriptive statistics of the summed responses for the attitude indexes.

Table 5

Descriptive Statistics: Attitude Statements

		Positive Attitude Index	Negative Attitude Index
Response frequency:		1523	1691
Missing data:		368	200
Mean		25.50	11.08
Median		26	11
Mode		26	12
Std. Deviation		5.07	2.52
Range		27	12
Minimum		9	4
Maximum		36	16
Percentiles	25	23	9
	50	26	11
	75	29	13

Included in the positive attitude index were the responses from 1523 students. The range of the summed values of the selected statements included a low response score of 9 to a high response score of 36. The mean response sum is 25.50; the median is 26 and the mode is 26.

Included in the negative attitude index were the responses from 1691 students. The range of the summed values of the selected statements included a low response score of 4 to a high response score of 16. The mean response sum is 11.08; the median is 11 and the mode is 12.

Behavior Determinant

The final section of the pretest and posttest document are those statements which explore the respondents' behavioral predisposition to violence as a response to situational statements. Each statement had five response choices. These items were coded 0 for passive/aggressive and 1 for problem solver. The factor analysis, shown in table 6, yielded only one factor. Therefore, the sum of responses across cases was recorded in a new variable, behavior score.

Table 6

Factor Analysis: Behavior Statements

Factor Statements:	1
1. Someone Lee doesn't know insults her/his mother. Lee should…	.406
2. One of Lee's friends gets too friendly with Lee's boy/girlfriend. Lee should…	.664
3. A stranger Lee's age bumps int her/him on the street. Lee should…	.475
4. Someone has falsely accused Lee of stealing something from her/him. Lee should.	.729
5. Someone Lee hardly knows tells the principal that Lee has been selling drugs at school. Lee should…	.696
6. Lee sees two girls having a fight. Lee should…	.565

Extraction Method: Principal Component Analysis.
1 component extracted.

A total of 1891 students completed this section of the pretest and posttest. These statements were coded 0 for passive/aggressive responses and 1 for a response that indicated a problem solver. The range of possible scores was a low score of 0 to the highest score of 6. The mean score was 1.85. The median is 1 and the mode is 0. Table 7 shows the frequency distribution and descriptive statistics for the summed behavior statements.

Table 7

Descriptive Statistics: Behavior Statements

Response frequency:	1891	
Mean	1.85	
Median	1	
Mode	0	
Std. Deviation	1.74	
Range	6	
Minimum	0	
Maximum	6	
Percentiles	25	0
	50	1
	75	3

Table 8 shows the number of participants and means for the pretest and posttest analysis of the three knowledge indexes, the two attitude indexes and the behavior index.

Table 8

Response Frequency and Means of Knowledge, Attitude and Behavior Indexes for Pretests and Posttests

		N	Mean
Factual Knowledge Index	Pretest	1149	3.66
	Posttest	576	3.91
Murder Knowledge Index	Pretest	1190	2.23
	Posttest	585	2.30
Alcohol Knowledge Index	Pretest	1222	1.39
	Posttest	599	1.48
Positive Attitude Index	Pretest	1029	22.58
	Posttest	525	23.04
Negative Attitude Index	Pretest	1125	11.08
	Posttest	566	11.08
Behavior Index	Pretest	1275	1.46
	Posttest	616	2.66

Hypotheses

Hypothesis 1: Students who participate in violence prevention training will show an increase in factual knowledge about violence from pretest to posttest. The t test of the factual knowledge index yielded a mean of 3.66 on the pretest and 3.91 on the posttest. This test was significant at the level of .05. The t test of murder knowledge index yielded a mean of 2.23 on the pretest and 2.30 on the posttest. This test was significant at the level of .05. The t test of alcohol knowledge index yielded a mean of 1.39 on the pretest and 1.48 on the posttest. This test was significant at the level of .05. These three indexes represent a positive change in the knowledge level of the participants as illustrated with a higher mean score on the posttest indexes. This research hypothesis is accepted. There is a positive gain in knowledge between the pretest and the posttest.

Table 9 shows the results of the t tests for each of the three knowledge indexes, comparing pretest and posttest data.

Table 9

T Tests for Knowledge Indexes

		F	Sig.	T	Sig.(1-tailed)
Factual Knowledge Index	Equal variances assumed	.626	.429	-3.945	.000
	Equal variances not assumed			-3.905	.000
Murder Knowledge Index	Equal variances assumed	6.725	.010	-1.811	.035
	Equal variances not assumed			-1.872	.030
Alcohol Knowledge Index	Equal variances assumed	.141	.707	-2.883	.002
	Equal variances not assumed			-2.904	.002

Hypothesis 2: Students who participate in violence prevention training will show a decrease in attitudinal predisposition to engage in violence from pretest to posttest. The t test of the positive attitude index yielded a mean of 22.58 on the pretest and 23.04 on the posttest. This test was significant at the .05 level. The t test of the negative attitude index yielded a mean of 11.08 on the pretest and 11.08 on the posttest. The mean for the positive attitude index changed significantly in the anticipated direction. This would indicate a decrease in attitudinal predisposition to engage in violence. The mean for the negative attitude index did not change. Hypothesis 2 is accepted.

Table 10 shows the results of the t tests for the two attitude indexes, comparing pretest and posttest data.

Table 10

T Tests for Attitude Indexes

		F	Sig.	T	Sig.(1-tailed)
Positive Attitude Index	Equal variances assumed	.023	.879	-1.882	.030
	Equal variances not assumed			-1.889	.029
Negative Attitude Index	Equal variances assumed	.056	.814	.052	.479
	Equal variances not assumed			.051	.479

Hypothesis 3: Students who participate in violence prevention training will show a decrease in reported behavioral predisposition to engage in violence. The t test of the behavior index resulted in a mean of 1.46 on the pretest and a mean of 2.66 on the posttest, indicating a positive shift toward problem solving. This was significant at the .05 level. Hypothesis 3 is accepted.

Table 11 shows the results of the t tests for the behavior index, comparing pretest and posttest data.

Table 11

T Tests for Behavior Index

		F	Sig.	T	Sig.(1-tailed)
Behavior Index	Equal variances assumed	64.187	.000	-14.940	.000
	Equal variances not assumed			-14.019	.000

Hypothesis 4: There will no difference between the participating schools. A one-way analysis of variance was conducted to determine the significance of variation in means between the two schools that participated in both the pretest and posttest. The analysis of

variance results are presented in Appendix 5. The means were compared for the knowledge, attitude and behavior indexes. Table 12 presents these results as a summary matrix.

Table 12

Comparison of Means between Schools for all Indexes

School	Factual Knowledge Index	Murder Knowledge Index	Alcohol Knowledge Index	Positive Attitude Index	Negative Attitude Index	Behavior Index
Pretest						
Middle #8	3.51	2.24	1.40	22.36	11.10	1.51*
Middle #10	3.97*		2.19	1.37	23.03*	
11.04	1.34					
Posttest						
Middle #8	3.55	2.18	1.42	22.47	10.75	2.25
Middle #10	4.15*		2.38*	1.52*		
23.38*	11.28*	2.94*				

* Differences between means significant at the .05 level

The differences in the means between the two schools was significant at the .05 level for the factual knowledge, positive attitude and behavior index for the pretest comparison. The differences between the means of the two schools was significant at the .05 level for the factual, murder and alcohol knowledge indexes, the positive and negative attitude indexes and the behavior index for the posttest comparison. Hypothesis four, that the schools are not different, is rejected.

Hypotheses 5a, 5b and 5c addressed the grades of the respondents. Appendix 6 shows the results of the analysis of variance for 7th and 8th grade responses for all indexes.

Hypothesis 5a: As grade level increases, general knowledge will increase in the pretest and the posttest. A one-way analysis of variance was conducted to determine the

significance of variation in means between the two grades that participated in both the pretest and posttest. The means were examined for the knowledge, attitude and behavior indexes. Table 13 presents these results as a summary matrix. The means of the knowledge indexes are significantly different between the grades. Hypothesis 5a is accepted.

Table 13

Comparison of Means between Grades for Knowledge Indexes

Grade	Factual Knowledge Index	Murder Knowledge Index	Alcohol Knowledge Index
Pretest			
7th Grade	3.54	2.17	1.41
8th Grade	3.80*	2.30*	1.36
Posttest			
7th Grade	3.79	2.22	1.46
8th Grade	4.03*	2.38*	1.49

* Differences between means significant at the .05 level

Hypothesis 5b: As grade level increases, attitudinal predisposition to violence would decrease. As can be seen in Table 14 the negative attitude index is not different between the two grades for either the pretest or the posttest. The pretest means differ with the 7th grade showing a higher mean on the pretest than the 8th grade. Although this difference is significant at the .05 level, it is in the opposite direction from that predicted. Hypothesis 5b is rejected.

Table 14

Comparison of Means between Grades for Attitude Indexes

Grade		Positive Attitude Index	Negative Attitude Index
7th Grade	Mean		
	Pretest	22.82*	11.15
	Posttest	22.79	11.15
8th Grade	Mean		
	Pretest	22.26*	11.15
	Posttest	23.27	11.15

* Differences between means significant at the .05 level

Hypothesis 5c: As grade level increases, behavioral predisposition to violence would decrease. Table 15 shows a higher mean difference on the posttest for the eighth grade compared to the seventh grade but, on the pretest, the mean for the eighth grade is lower. An independent samples t-test was conducted to determine the significance of variation in means between the two grades that participated in both the pretest and posttest. The difference in means is significant at the level of .05 for the pretest and the posttest comparisons. Hypothesis 5c is accepted for the posttest comparison but rejected for the pretest.

Table 15

Comparison of Means between Grades for Behavior Index

Grade	Behavior Index	Sig. (1-tailed)
Pretest		
7th Grade	1.76*	.000
8th Grade	1.11	.000
Posttest		
7th Grade	2.47	.004
8th Grade	2.85*	.004

* Differences between means significant at the .05 level

Table 16 shows the mean differences for the knowledge indexes, for the ages of all students, 13, 14, and 15. A one-way analysis of variance with a post-hoc Bonferroni

multiple comparison was conducted to determine the significance of variation in means between the ages 13, 14, and 15 for students who participated in both the pretest and posttest. The anova with Bonferroni are presented in Appendix 7.

Table 16

Comparison of Means by Age of Respondents for Knowledge Indexes

	Student Age	Factual Knowledge Index	Murder Knowledge Index	Alcohol Knowledge Index
Pretest	13	3.82	2.28	1.38
	14	3.66	2.18	1.39
	15	3.62	2.32	1.40
Posttest	13	3.99	2.29	1.47
	14	4.07	2.32	1.46
	15	4.02	2.32	1.51

Hypothesis 6a: As age increases, general knowledge will increase from the pretest to the posttest. The difference between means for the ages is not significant for the knowledge indexes. Hypothesis 6a is rejected.

Table 17 shows the means for all ages for the positive and negative attitude indexes.

Table 17

Comparison of Means by Age of Respondents for Attitude Indexes

	Student Age	Positive Attitude Index	Negative Attitude Index
Pretest	13	23.03	11.22
	14	22.85	11.11
	15	21.48	10.92
Posttest	13	23.48	11.30
	14	23.08	11.12
	15	23.43	11.28

Hypothesis 6b: As age increases, attitudinal predisposition to violence will decrease from the pretest to the posttest. The difference between means for the ages is significant for the positive attitude index. The multiple comparison analysis shows that the means are significantly higher for the ages of 13 and 14 compared to the mean for age 15. The means for ages 13 and 14 are not significantly different from each other. Because the difference between means is not in the anticipated direction, hypothesis 6b is rejected.

Hypothesis 6c: As age increases, reported behavioral predisposition to violence will decrease in the pretest and posttest. Table 18 shows the means for all ages for the behavior index. There is no significant difference between the means for the ages for the behavior index. Hypothesis 6c is rejected.

Table 18

Comparison of Means by Age of Respondents for Behavior Index.

	Student Age	Behavior Index
Pretest	13	1.58
	14	1.75
	15	1.74
Posttest	13	2.79
	14	2.59
	15	2.96

Hypotheses 7a, 7b and 7c addressed the gender of the respondents. Appendix 8 shows the results of the analysis of variance for males and females for all indexes. Table 19 shows the means and significance for the knowledge indexes for males and females.

Table 19

Comparison of Means by Sex for Knowledge Indexes

Sex		Factual Knowledge Index	Murder Knowledge Index	Alcohol Knowledge Index
Pretest	Male	3.70	2.21	1.35
	Female	3.67	2.27	1.42*
Posttest	Male	3.87	2.32	1.48
	Female	3.99	2.31	1.48

*Significant at the level of .05

Hypothesis 7a: Females will show more general knowledge than males will on both the pretest and the posttest. The mean differences between males and females on the pretest for the alcohol knowledge index is statistically significant in the predicted direction. However, there is no statistical difference between the means for any of the knowledge indexes between males and females on the posttest. This hypothesis is rejected.

Table 20 shows the comparison of means for the positive and negative attitude indexes between males and females for the pretests and posttests.

Table 20

Comparison of Means by Sex for Attitude Indexes

	Sex	Positive Attitude Index	Negative Attitude Index
Pretest	Male	21.65	10.85
	Female	23.62*	11.46*
Posttest	Male	22.38	10.90
	Female	23.86*	11.31*

*Significant at the level of .05

Hypothesis 7b: Females will show less attitudinal predisposition to violence than males will on both the pretest and the posttest. The means for positive attitudinal predisposition toward violence increased for both males and females between the pretests and the posttests. The mean difference for the negative attitude index increased for males

on the posttest compared to their pretest and decreased for females on the posttest compared to their pretest. The decrease in attitudinal predisposition toward violence between the pretest and the posttest for females was anticipated. Hypothesis 7b is accepted.

Table 21 shows the comparison between pretest and posttest means for males and females for the behavior index.

Table 21

Comparison of Means by Sex for Behavior Index

	Sex	Behavior Index
Pretest	Male	1.38
	Female	1.67*
Posttest	Male	2.50
	Female	2.85*

*Significant at the level of .05

Hypothesis 7c stated that females would show less behavioral predisposition than males would on both the pretest and the posttest. The mean difference for females for the behavior index is higher on both the pretest and the posttest. Hypothesis 7c is accepted.

Process Evaluation

The instructors of the curriculum, the classroom teachers who served as observers and students were asked to complete evaluation surveys at the conclusion of the violence prevention curriculum. These results are presented as case study materials and serve to supplement the student data gathered on the pretest and posttest instruments. The threats to internal and external validity that were discussed in reference to the completion of the pretest and posttest documents hold for these case studies also. In addition, there was a further selection bias introduced by curriculum instructors. Some instructors opted to

administer the post-program survey only. Table 22 lists the descriptive statistics for the student surveys. Two elementary schools and five middle schools, representing 1422 students in grades three through nine, participated in the violence prevention curriculum and completed the student post-program survey. During 1995, 546 students completed the post-program survey. During 1996, 671 students completed the survey and during 1997, surveys were completed by 153 students. Of the total number of students who recorded their gender, 412 or 50.6 percent were male, and 403 or 49.4 percent were female. The program was either somewhat useful, a fair amount useful or a lot useful for 82.6 percent of students responding. 82.8 percent of students enjoyed the program somewhat, a fair amount or a lot; and 82.7 percent found the program somewhat, a fair amount or a lot interesting.

Self-reports of application of the information presented in the program indicate that 53.9 percent of students used the information and 57.6 percent of students reported a change in their attitude.

Table 22

Descriptive Statistics for Student Postprogram Surveys

School	Frequency
Middle 1	20
Middle 7	113
Middle 8	488
Middle 9	16
Middle 10	370
Total	1007
Grade	
7th Grade	629
8th Grade	324
9th Grade	22
Total	975
Year Group	
1995	284
1996	671
Total	955
Gender	
Male	342
Female	329
Total	671
Useful	
not at all	75
a little	133
somewhat	170
fair amount	288
a lot	314
Total	980

Table 22 (Continued)

Enjoyed Program	Frequency
not at all	70
a little	128
somewhat	156
fair amount	229
a lot	394
Total	977
Interesting Program	
not at all	79
a little	123
somewhat	163
fair amount	242
a lot	373
Total	980
Good Teachers	
not at all	62
a little	75
somewhat	109
fair amount	202
a lot	531
Total	979
Have used information	
Yes	459
No	505
Total	964
My Attitude Changed	
Yes	531
No	437
Total	968

Program Length		Mode	Median
too long	176		
just right	524	2	2
too short	268		
Total	968		

Table 22 (Continued)

What I Liked Best	Frequency	Mode	Median
Everything	20		
Enjoy	8		
Learn	48		
Participation	82		4
Other	112	5	
Total	270		
Worst thing about program			
Mode Median			
Nothing	98		
Too long	4		
Boring	8		
Participation	30		4
Other	118	5	
Total	258		
Suggested Improvements		Mode	Median
No improvement	94	1	
Add more/longer program	52		2
Shorter program	6		
More activity/action	36		
Other	66		
Total	254		

Table 23 lists the frequencies of responses from the students' regular classroom teachers who served as observers during the administration of the curriculum. The observers who participated in the completion of the observer survey represented four elementary, one art and one middle school. Grades three, five and seven are represented by their surveys. Of the seventeen observers, only nine reported age groupings of their students, with one reporting ages 12 to 13 and eight reporting age group under 10. Eight observers reported for years 1995 and 1997, and one observer reported for 1996.

In the section of the survey that asked the observers for their assessment of student response to the program: 87.5 percent reported somewhat, a fair amount or a lot for their

students' ability to stay out of fights; 81.3 percent reported somewhat, a fair amount or a lot for their students' ability to use conflict resolution skills; 87.6 percent reported somewhat, a fair amount or a lot for their students' ability to handle anger in non-violent ways; 93.3 percent reported somewhat, a fair amount or a lot for their students' attitude toward violence; 93.4 percent reported a little, somewhat, a fair amount or a lot for their students' reduced involvement in incidents of fighting; and, 90.0 percent reported a little, somewhat, a fair amount or a lot for their students' reduced involvement in incidents involving other forms of violence.

Table 23

Frequency Distribution: Observer Surveys

School	Frequency
Middle 8	2
Grade	
7th Grade	2
Age Group	
Age 12 To 13	1
Year Group	
1995	1
1996	1
Stay Out Of Fights	
A Fair Amount	2
Conflict Resolution	
A Fair Amount	2
Handle Anger	
Somewhat	1
A Fair Amount	1
Attitude Towards Fighting	
A Fair Amount	1

Table 23 (Continued)

Reduced Involvement In Fights	Frequency
A Fair Amount	2
Less Involved In Other Types Of Violence	
Somewhat	1
A Fair Amount	1
Total	2

Table 24 lists the frequencies of responses from the AmeriCorps members who were instructors of the program. The instructors who participated in the completion of the instructor survey accounted for seventh grade students at three middle schools. When asked to assess the training materials, 71.4 percent responded that the training materials were very appropriate and somewhat appropriate. When asked if the training materials were used with variation, 50.0 percent responded using slight variation with the materials and 42.9 percent indicated moderate or extensive variation. The reason for the instructor to vary from the program materials was given as the ethnicity of the participants in 53.8 percent of the cases and 38.5 percent responded that variation was to accommodate the comprehension of the participants.

Table 24

Frequency Distribution: Instructor Surveys

School	Frequency
Middle School #1	6
Middle School #7	7
Middle School #8	1
Grade	
7th Grade	14

Table 24 (Continued)

Materials Appropriate	Frequency	Mode	Median
Very appropriate	9	1	1
Somewhat appropriate	1		
Somewhat inappropriate	4		
Materials use variation			
Extensive variation	4		
Moderate variation	2		
Slight variation	7	3	3
No variation	1		
Reason for variance from program materials			
Ethnicity of participants	7	2	2
Comprehension of participants		5	
Other	1		

The Prothrow-Stith Evaluation

Violence prevention programs which are appropriate for adolescents developmentally and which have a realistic cultural context can be expected to be effective (Prothrow-Stith M.D., 1987). In 1985, the 10 session curriculum was evaluated using a pre- and posttest with four 10th grade classes. Two classes were assigned to the experimental group and received the violence prevention curriculum and two classes were assigned to the control group and did not participate in the violence prevention curriculum. Both groups were evaluated with the same pre- and post- test approximately 10 weeks apart. The tests measured both knowledge and attitudes about anger, violence and homicide. The experimental group had significantly higher posttest scores than the control group. There was no difference in the two groups pre-test scores.

The Prothrow-Stith curriculum was later evaluated using pre- and posttesting of four tenth-grade health classes of 106 students. Two classes were assigned to the experimental group, while the other two classes were the control. Analysis of the test

scores from both groups showed that the experimental group had significantly higher posttest scores than the control group. There was no difference between the pre-test scores for the two groups (Prothrow-Stith M.D., 1987).

Mental Health Association of Greater Dallas: 1994 Evaluation

The Prothrow-Stith curriculum was purchased by the MHA and administered in a variety of settings in 1994. Utilizing pre- and posttest instruments, 880 youth in 27 different group settings including schools and residential treatment centers were assessed for their knowledge, reasoning ability, significant change, and willingness to respond in a non-violent manner. The overall positive student responses increased by 11 percent.

Summary

This chapter began with an examination of the data analyses and individual hypotheses were examined. The acceptance or rejection of hypotheses were reported and discussed. Table 19 gives a summary of the acceptance or rejection of each hypothesis.

Table 25

Summary of Hypotheses: Test Results

Hypothesis	Accept	Reject
Hypothesis 1	x	
Hypothesis 2	x	
Hypothesis 3	x	
Hypothesis 4		x
Hypothesis 5a	x	
Hypothesis 5b		x
Hypothesis 5c	x Posttest	x Pretest
Hypothesis 6a		x
Hypothesis 6b		x
Hypothesis 6c		x
Hypothesis 7a		x
Hypothesis 7b	x	
Hypothesis 7c		x

The research hypotheses 1, 2, 3, 5a, 5c for posttest, and 7b were supported. Hypotheses 4, 5b, 5c for pretest, 6b, 6c, 7a and 7c were not supported. Hypothesis 1 stated that students who participate in violence prevention training will show an increase in factual knowledge about violence from pretest to posttest. The finding that supports acceptance of this research hypothesis is consistent with the findings from the Prothrow-Stith and the Mental Health Association evaluation.

CHAPTER 6

SUMMARY

Introduction

The evaluation of data collected by AmeriCorps members from the students, classroom teachers and their own assessment of the program materials and application of the violence prevention curriculum has been presented and discussed. The effectiveness of the Prothrow-Stith violence prevention curriculum as it was adapted for administration in elementary and middle schools was assessed; illustration of observed behavior of the students was documented; and, insight into the application of the adapted curriculum was gained.

Summary of the Problem

The central problem addressed in this study is: is the curriculum effective? Does the research support the premise that the effectiveness of adapting a program for an audience much younger than originally intended will be supported? The findings from the surveys answered by the students post-program, their classroom teachers, and the AmeriCorps members who were program instructors also affirm the effectiveness of the program, although not in a statistically significant manner.

Hypothesis 1 states that students who participate in violence prevention training will show an increase in factual knowledge about violence from pretest to posttest. The findings from analysis of the pretest and posttest results permit this question to be answered affirmatively. These findings are consistent with Orpinas'findings in her

curriculum evaluation of a violence prevention program that involved peer leaders who were trained to modify social norms about violence (Orpinas, 1994). These findings are also consistent with the Prothrow-Stith and Mental Health Association evaluations.

Hypothesis 2 stated that students who participate in violence prevention training will show a decrease in reported attitudinal predisposition to engage in violence from pretest to posttest. The mean for the positive attitude index changed significantly in an anticipated positive direction. This would indicate a decrease in attitudinal predisposition to engage in violence. The influence of students'participation in the violence prevention curriculum is clearly evident with the significant increase in score for the positive attitude index.

Hypothesis 3 stated that students who participate in violence prevention training will show a decrease in reported behavioral predisposition to engage in violence from pretest to posttest. Comparison of the means for the pretest and posttest assessment behavioral predisposition was significantly higher for the posttest than for the pretest, indicating a positive shift toward problem solving. Participation in the violence prevention curriculum positively influenced students'abilities to evaluate their anticipated behavioral response to descriptions of situational conflict. This result is also an indicator of the applicability of the use of the Prothrow-Stith behavioral component on the pretest and posttest instrument as adapted for the elementary and middle school populations. Younger students related to the situational conflict examples in a manner consistent with the responses found by Prothrow-Stith in the high school population.

Hypothesis 4 stated that the schools would not vary one from another. The analysis of the pretests and posttests did not support this null hypothesis. The schools were found to be different on the pretest on the factual knowledge, positive attitude and behavior index and for the factual, murder and alcohol knowledge indexes, the positive and negative attitude indexes and the behavior index for the posttest comparison. There is no explanation for the difference in the results between the schools that can be based in ethnic composition of the school populations, socio-economic status, or gender characteristics. Both of the participating schools are in the inner-city area of a large metropolitan city and in similar neighborhoods. The populations are diverse within each school, with students representing African-American, Anglo-American, Asian American, Hispanic and Native American ethnic groups. Middle School #8 had 411 males and 396 females participate in the pretest and 122 males and 113 females participate in the posttest. Middle School #10 had 182 males and 182 females participate in the pretest and 183 males and 183 females participate in the posttest. We are left with the question of determining the source for the variation between the two schools.

Hypotheses 5a, 5b and 5c addressed the grades of the respondents. Specifically: as grade level increases, general knowledge will increase from pretest to posttest; as grade level increases, attitudinal predisposition to violence will decrease from pretest to posttest; and, as grade level increases, reported behavioral predisposition to violence will decrease from pretest to posttest. First, general knowledge was found to be significantly higher with the 8^{th} grade students on the posttest, compared to the 7^{th} grade students. Second, the pretest and posttest comparison by grades of the positive attitude index yielded a

significantly higher posttest results for the 8th grade. This is indicative of a decrease in attitudinal predisposition toward violence. Third, the posttest comparison showed a significantly higher 8th grade result compared to the 7th grade for the analysis of the behavioral predisposition toward violence. The hypothesis that the grade level increase would show an increase in each of the three components of the assessment instrument is supported by the posttest results.

Hypotheses 6a, 6b and 6c addressed the ages of the respondents: as age increases, general knowledge will increase from pretest to posttest; attitudinal predisposition to violence will decrease from pretest to posttest; and, reported behavioral predisposition to violence will decrease from pretest to posttest. The difference between means for the ages is not significant for the knowledge indexes. The difference between means for the ages is significant for the positive attitude index but not in the anticipated direction. The multiple comparison analysis shows that the means are significantly higher for the ages of 13 and 14 compared to the mean for age 15. There is no significant difference between the means for the ages for the behavior index. These hypotheses that predicted an increase in results from pretest to posttest, as the age increases, are not supported. This result indicates that knowledge, attitude and behavior are not a function of aging in this research situation.

Hypotheses 7a, 7b and 7c addressed the sex of the respondents: Females will show more general knowledge than males will on both the pretest and the posttest; females will show less attitudinal predisposition toward violence than males will on both the pretest and the posttest; and, females will show less behavioral predisposition toward violence than males will on both the pretest and the posttest. There is no statistical difference

between the means for any of the knowledge indexes between males and females on the posttest. However, the attitudinal predisposition toward violence decreased significantly from the pretest to the posttest for females compared to males and the mean difference for females for the behavior index is higher on both the pretest and the posttest. The results of the analysis based on these hypotheses would indicate that general knowledge about violence is not a function of sex. Females, however, have less of an attitudinal predisposition toward violence and less of a behavioral predisposition toward violence than males.

Implications of Findings

The proliferation of violence prevention initiatives in schools is comprehensive and multi-faceted. Peer mediation programs are among the most wide-spread, with other programs addressing such needs as self-esteem building, anger management, problem solving, diversity appreciation, and responsible gun management. Evaluation efforts have improved in more recent years. However, there remains a paucity of information about the evaluation of violence prevention programs. This evaluation of the adaptation of the Prothrow-Stith curriculum supports the application of the curriculum in settings other than initially intended.

Designers of violence prevention, problem solving, peace making, conflict resolution and other prevention programs could look to the results of this evaluation for consideration of the factors that influence general knowledge, attitude and behavior toward violence. Knowledge of differences between the sexes indicates an opportunity to tailor interventions and prevention strategies that stress the positive aspects of resolving

conflict with peaceful, non-aggressive approaches. Further examination of the age differences in the results may yield information about the influences that strengthen the quality of resilience or that indicate shifts in attitude and behavior in younger children.

Summary

Historically, Americans have looked to their school system to encourage the intellectual, economic and moral growth of children. Solutions to such problems as poverty, the loss of international competitiveness, or the rise in youth violence have been asked of the schools (Currie & Skolnick, 1997). What happens at school is pivotal, both to students and to the future of our nation. While schools are not the cause of youth violence they can, however, provide options to violent behavior and pattern appropriate social behavior (Dill & Haberman, 1995). Research confirms that students with superior language skills and analytic abilities are less likely to use force to persuade and more likely to use creative and intellectual exercises to imagine and respect differing viewpoints (Prothrow-Stith, 1994).

Inner cities continue to be more prone to violence with numbers of violent juvenile activity higher today than in the mid-1980's (Timms & Kendall, 1999). Schools alone cannot provide the resources needed to prevent violence. The greater community must participate. In citing Boston as an example, Steven Drizin at the Northwestern University School of Law's Children and Family Justice Center, cites Boston as a city that dramatically reduced its gun-related violence. The city instituted a coalition of community groups that included public health professionals, the media, community-based groups,

church groups, juvenile justice service providers, the police and probation officers (Timms & Kendall, 1999).

The use of AmeriCorps members to administer the violence prevention curriculum in the schools in their neighborhoods, in which they live and work, yields continuity and a high degree of visibility to the worth of their community service. For many children, the AmeriCorps member may be the significant elder person who fosters resiliency through being a stable and supportive mentor. The findings of this research support the continuation of the interaction of the AmeriCorps members with the schools in their neighborhoods, particularly, their continued participation as instructors of the violence prevention curriculum.

> "Violence and its threat sabotages the fundamental human need for a sense of security and place in the world. While the temptation to take strong actions against violence after the fact is attractive to many, a wiser and ultimately more effective course is that which looks at prevention."
>
> Michael Resnick, Ph.D., University of Minnesota, Minneapolis (Lawless, 1993).

APPENDIX 1

YOUTH OPINION SURVEY #1

VIOLENCE PREVENTION PROGRAM
YOUTH OPINION SURVEY #1

SCHOOL _____GRADE _____ DATE _____

Please check one: _____ MALE _____ FEMALE Date of Birth _____
****

For each sentence, decide whether you think it is true or false and circle the answer.
****

1. Alcohol (beer, wine, or hard liquor) can make people fight.
   True False
2. Blacks kill whites more often than blacks kill blacks.
   True False
3. More people are killed during an argument than for any other reason.
   True False
4. The most frequent cause of death for people ages 15 to 24 is sickness.
   True False
5. The most frequent cause of death for black males ages 15 to 24 is murder.
   True False
6. The weapon used most in a murder is a knife.
   True False
7. In most murders, the killer and the victim know each other.
   True False
8. Half of all murder victims had been drinking alcohol.
   True False
9. More women than men are murder victims.
   True False
10. More people are hurt or killed by their own gun than use it for protection.
    True False
11. Men commit more murders than women.
    True False
12. Drinking beer isn't bad for you like drinking hard liquor (whiskey, vodka, or gin).
    True False
13. Most murders happen because of fights between two different races.
    True False
14. Crime victims who are carrying a weapon are more likely to be killed than crime victims who are not carrying a weapon.
    True False
15. A poor neighborhood that is mostly white will have about the same murder rate as a poor neighborhood that is mostly black.
    True False

****

NOTE: When the word "fight" is used below, think about a fist-fight or other physical fight involving hitting, pushing, or shoving.
CIRCLE ONE NUMBER FOR EACH STATEMENT.

****

	really disagree	disagree	agree	really agree
16.If I'm challenged, I'm going to fight.	1	2	3	4
17.If I walked away from a fight, I'd be a coward.	1	2	3	4
18.Getting angry is a normal part of life.	1	2	3	4
19.I can stay out of fights.	1	2	3	4
20.Once a fight starts, there's no way to stop it.	1	2	3	4
21.If a girl sees someone flirting with her boyfriend, she should fight with her.	1	2	3	4
22.If someone hits me first, I'm going to hit back.	1	2	3	4
23.If I do what my parents tell me, I'll stay out of fights.	1	2	3	4
24.If someone calls my mother a bad name, I would have to fight.	1	2	3	4
25.If someone steals from me, the best way to handle it is to beat up the person.	1	2	3	4
26.If someone called me a bad name, I would ignore them or walk away.	1	2	3	4
27.If I was in a fight, I'd feel safer if I had a knife.	1	2	3	4
28.People should always avoid fighting.	1	2	3	4
29.Anyone who avoids fighting is going to get picked on.	1	2	3	4
30.I don't need to fight because there are other ways to deal with anger.	1	2	3	4

31.If I mind my own business I can stay out of fights.	1	2	3	4
32.When you're really angry, there's no way you can control yourself.	1	2	3	4
33.There is never a good reason for hitting anyone.	1	2	3	4
34.I can learn how to stay out of a fight.	1	2	3	4
35.When you are so mad that you want to hurt someone, it's always best to find another way to handle your anger.	1	2	3	4
36.When I get into a fight, it is my own fault.	1	2	3	4

****

The following situations describe what happens to a teenager named Lee. Choose one answer that tells what you would do.
Circle the number for your answer.

****

37. Someone Lee doesn't know insults her/his mother. Lee should ...
(1)ignore that person
(2)insult that person's mother
(3)fight that person
(4)tell the person they are an orphan
(5)ask that person why they are angry with her/him

38. One of Lee's friends gets too friendly with Lee's boy/girlfriend. Lee should ...
(1)get friendly with their boy/girlfriend
(2)fight her/his friend
(3)ignore it
(4)talk to her/his friend about it
(5)stop being her/his friend

39. A stranger Lee's age bumps into her/him on the street. Lee should ...
(1)apologize to the stranger
(2)push back
(3)ignore it
(4)make a joke about it
(5)wait for the stranger to apologize

40. Someone has falsely accused Lee of stealing something from her/him. Lee should
(1)ignore it
(2)tell the person to fight
(3)call that person a liar
(4)say that she/he did it
(5)talk to that person

41. Someone Lee hardly knows tells the principal that Lee has been selling drugs at school. Lee should ...

(1)threaten them for spreading the lies
(2)tell the principal the person is a liar
(3)ignore it
(4)ask them why they are spreading lies
(5)beat up the person

42. Lee sees two girls having a fight. Lee should ...

(1)ignore it
(2)try to break up the fight
(3)stand around and watch the fight
(4)help one girl beat up the other
(5)tell them, "More, more"

APPENDIX 2

YOUTH OPINION SURVEY #2

VIOLENCE PREVENTION PROGRAM
YOUTH OPINION SURVEY #2

SCHOOL _____GRADE _____ DATE _____

Please check one: _____ MALE _____ FEMALE Date of Birth _____
****

Please choose one response to the following:

	Not at all	*A Little*	*Somewhat*	*A Fair Amount*	*A Lot*
Do you think the program was useful to you?	1	2	3	4	5
Did you enjoy the program?	1	2	3	4	5
Was the program interesting?	1	2	3	4	5
Were the teachers good?	1	2	3	4	5

****

Have you used the information presented in the program?
_____ YES _____ NO

If YES, how?
_____
_____

Has your attitude about violence changed since your participation in the program?
_____ YES _____ NO
If YES, how?
_____
_____

How do you feel about the length of the program being ten sessions?
_____ TOO LONG _____ JUST RIGHT _____ TOO SHORT

What was the best thing about the program?
_____
_____

What was the worst thing about the program?
_____
_____

How could the program be improved?
_____

****

For each sentence, decide whether you think it is true or false and circle the answer.

****

1. Alcohol (beer, wine, or hard liquor) can make people fight.
   True False
2. Blacks kill whites more often than blacks kill blacks.
   True False
3. More people are killed during an argument than for any other reason.
   True False
4. The most frequent cause of death for people ages 15 to 24 is sickness.
   True False
5. The most frequent cause of death for black males ages 15 to 24 is murder.
   True False
6. The weapon used most in a murder is a knife.
   True False
7. In most murders, the killer and the victim know each other.
   True False
8. Half of all murder victims had been drinking alcohol.
   True False
9. More women than men are murder victims.
   True False
10. More people are hurt or killed by their own gun than use it for protection.
    True False
11. Men commit more murders than women.
    True False
12. Drinking beer isn't bad for you like drinking hard liquor (whiskey, vodka, or gin).
    True False
13. Most murders happen because of fights between two different races.
    True False
14. Crime victims who are carrying a weapon are more likely to be killed than crime victims who are not carrying a weapon.
    True False
15. A poor neighborhood that is mostly white will have about the same murder rate as a poor neighborhood that is mostly black.
    True False

****

NOTE: When the word "fight" is used below, think about a fist-fight or other physical fight involving hitting, pushing, or shoving.
CIRCLE ONE NUMBER FOR EACH STATEMENT.

****

	really disagree	disagree	agree	really agree
16.If I'm challenged, I'm going to fight.	1	2	3	4
17.If I walked away from a fight, I'd be a coward.	1	2	3	4
18.Getting angry is a normal part of life.	1	2	3	4
19.I can stay out of fights.	1	2	3	4
20.Once a fight starts, there's no way to stop it.	1	2	3	4
21.If a girl sees someone flirting with her boyfriend, she should fight with her.	1	2	3	4
22.If someone hits me first, I'm going to hit back.	1	2	3	4
23.If I do what my parents tell me, I'll stay out of fights.	1	2	3	4
24.If someone calls my mother a bad name, I would have to fight.	1	2	3	4
25.If someone steals from me, the best way to handle it is to beat up the person.	1	2	3	4
26.If someone called me a bad name, I would ignore them or walk away.	1	2	3	4
27.If I was in a fight, I'd feel safer if I had a knife.	1	2	3	4
28.People should always avoid fighting.	1	2	3	4
29.Anyone who avoids fighting is going to get picked on.	1	2	3	4
30.I don't need to fight because there are other ways to deal with anger.	1	2	3	4

31.If I mind my own business I can stay out of fights.	1	2	3	4
32.When you're really angry, there's no way you can control yourself.	1	2	3	4
33.There is never a good reason for hitting anyone.	1	2	3	4
34.I can learn how to stay out of a fight.	1	2	3	4
35.When you are so mad that you want to hurt someone, it's always best to find another way to handle your anger.	1	2	3	4
36.When I get into a fight, it is my own fault.	1	2	3	4

****

The following situations describe what happens to a teenager named Lee. Choose one answer that tells what you would do. Circle the number for your answer.

****

37. Someone Lee doesn't know insults her/his mother. Lee should ...
(1)ignore that person
(2)insult that person's mother
(3)fight that person
(4)tell the person they are an orphan
(5)ask that person why they are angry with her/him

38. One of Lee's friends gets too friendly with Lee's boy/girlfriend. Lee should ...
(1)get friendly with their boy/girlfriend
(2)fight her/his friend
(3)ignore it
(4)talk to her/his friend about it
(5)stop being her/his friend

39. A stranger Lee's age bumps into her/him on the street. Lee should ...
(1)apologize to the stranger
(2)push back
(3)ignore it
(4)make a joke about it
(5)wait for the stranger to apologize

40. Someone has falsely accused Lee of stealing something from her/him. Lee should
(1)ignore it
(2)tell the person to fight
(3)call that person a liar
(4)say that she/he did it
(5)talk to that person

41. Someone Lee hardly knows tells the principal that Lee has been selling drugs at school. Lee should ...

(1)threaten them for spreading the lies
(2)tell the principal the person is a liar
(3)ignore it
(4)ask them why they are spreading lies
(5)beat up the person

42. Lee sees two girls having a fight. Lee should ...

(1)ignore it
(2)try to break up the fight
(3)stand around and watch the fight
(4)help one girl beat up the other
(5)tell them, "More, more"

****

THANK YOU

APPENDIX 3

INSTRUCTOR EVALUATION

VIOLENCE PREVENTION PROGRAM
INSTRUCTOR EVALUATION

SCHOOL _____ GRADE _____

Date started program _____Date completed program _____

Number in class at start _____ End _____ Age range of students _____

Do you note student attendance?

____ NO *(Go to INSTRUCTOR ATTENDANCE)*

____ YES *(Check one of the following)*
____ full attendance every session
____ student(s) absent 1 time
____ student(s) absent 2 times
____ other *please specify* _____

INSTRUCTOR ATTENDANCE: *(Check one response)*

____ Full attendance ____ Session(s) rescheduled ____ *(How many?)*

ASSESSMENT OF TRAINING MATERIALS: *(Check one response)*

For this group of students the training materials were:
____ very appropriate ____ somewhat appropriate

____ somewhat inappropriate ____ very inappropriate

The training materials were used with:
____ extensive variation ____ moderate variation

____ slight variation ____ no variation (Go to "If I could..." statements)

Variance from program materials for the following reason(s): *(Check all that apply)*
____ ages of participants ____ ethnicity of participants

____ comprehension of participants ____ knowledge/experience of instructor

____ other _____

****

If I could change the program materials I would:

_____

If I could change the participant evaluation I would:

_____

If I could change this evaluation I would:

_____

Thank you for your participation.
Please use reverse for additional comments.

APPENDIX 4

OBSERVER EVALUATION

VIOLENCE PREVENTION PROGRAM
OBSERVER EVALUATION

SCHOOL _____ GRADE _____

Date started program _____Date completed program _____

Number in class at start _____ End _____ Age range of students _____

EVALUATION OF INSTRUCTION

INSTRUCTOR _____

Please choose one response to the following:

	Excellent	*Proficient*	*Adequate*	*Marginal*
Instructor demonstrated knowledge of the curriculum	_____	_____	_____	_____
Instructor used terminology appropriate for students	_____	_____	_____	_____
Instructor complied with allotted time limitation	_____	_____	_____	_____
Instructor encouraged student participation	_____	_____	_____	_____

Comments:
_____
_____

ASSESSMENT OF STUDENT RESPONSE

Please choose one response to the following:

	Not at all	*A Little*	*Somewhat*	*A Fair Amount*	*A Lot*
Ability to stay out of fights	1	2	3	4	5
Ability to use conflict resolution skills	1	2	3	4	5
Ability to handle anger in non-violent ways	1	2	3	4	5
Attitude towards fighting	1	2	3	4	5
Reduced involvement in incidents of fighting	1	2	3	4	5
Reduced involvement in incidents involving other forms of violence	1	2	3	4	5

Please describe an incident where students demonstrated the use of conflict resolution skills learned through the curriculum:

_____

_____

_____

_____

****

Your opinion is important to us. Please complete the following:

If I could change the program materials I would

_____

If I could change this evaluation I would

_____

_____

Thank you for your participation.

APPENDIX 5

ONE-WAY ANALYSIS OF VARIANCE: ASSESSMENT OF MEANS BETWEEN SCHOOLS

	Indexes	F	Sig. (1-tailed)
Pretest	Factual Knowledge	36.432	.000
	Murder Knowledge	.847	.179
	Alcohol Knowledge	.516	.236
	Positive Attitude	4.717	.015
	Negative Attitude	.165	.342
	Behavior	3.605	.029
Posttest	Factual Knowledge	30.965	.000
	Murder Knowledge	8.988	.001
	Alcohol Knowledge	3.420	.032
	Positive Attitude	4.842	.014
	Negative Attitude	5.819	.008
	Behavior	21.234	.000

APPENDIX 6

ONE-WAY ANALYSIS OF VARIANCE: ASSESSMENT OF MEANS BETWEEN GRADES

	Indexes	F	Sig. (1-tailed)
Pretest	Factual Knowledge	12.358	.000
	Murder Knowledge	6.856	.004
	Alcohol Knowledge	2.648	.052
	Positive Attitude	3.673	.028
	Negative Attitude	0.88	.174
	Behavior	58.821	.000
Posttest	Factual Knowledge	5.218	.011
	Murder Knowledge	6.132	.007
	Alcohol Knowledge	0.339	.280
	Positive Attitude	1.423	.116
	Negative Attitude	0.5	.240
	Behavior	6.829	.004

APPENDIX 7

ONE-WAY ANALYSIS OF VARIANCE: ASSESSMENT OF MEANS BETWEEN AGES

	Index	(I) Student Age	(J) Student Age	Mean Difference (I-J)	Sig.
Pretest	Factual Knowledge	13	14	.17	.261
			15	.20	.369
		14	13	-.17	.261
			15	.003	1.000
		15	13	-.20	.369
			14	-.003	1.000
	Murder Knowledge	13	14	.10	.340
			15	-.003	1.000
		14	13	-.10	.340
			15	-.14	.338
		15	13	.003	1.000
			14	.14	.338
	Alcohol Knowledge	13	14	-.005	1.000
			15	-.002	1.000
		14	13	.005	1.000
			15	-.001	1.000
		15	13	.002	1.000
			14	.001	1.000
	Positive Attitude	13	14	.18	1.000
			15	1.56*	.006
		14	13	-.18	1.000
			15	1.37*	.019
		15	13	-1.56*	.006
			14	-1.37*	.019
	Negative Attitudes	13	14	.11	1.000
			15	.30	.754
		14	13	-.11	1.000
			15	.19	1.000
		15	13	-.30	.754
			14	-.19	1.000
	Behavior Score 4	13	14	-.17	.506
			15	-.16	1.000
		14	13	.17	.506
			15	.001	1.000
		15	13	.16	1.000
			14	-.001	1.000

Appendix 7 (Continued)

Posttest	Factual Knowledge	13	14	-.007	1.000
			15	-.002	1.000
		14	13	.007	1.000
			15	.005	1.000
		15	13	.002	1.000
			14	-.005	1.000
	Murder Knowledge	13	14	-.003	1.000
			15	-.003	1.000
		14	13	1.000	1.000
			15	.003	1.000
		15	13	.003	1.000
			14	.003	1.000
	Alcohol Knowledge	13	14	.008	1.000
			15	-.004	1.000
		14	13	-.008	1.000
			15	-.005	1.000
		15	13	.004	1.000
			14	.005	1.000
	Positive Attitude	13	14	.39	1.000
			15	.004	1.000
		14	13	-.39	1.000
			15	-.35	1.000
		15	13	-.004	1.000
			14	.35	1.000
	Negative Attitudes	13	14	.18	1.000
			15	.001	1.000
		14	13	-.18	1.000
			15	-.16	1.000
		15	13	-.001	1.000
			14	.16	1.000
	Behavior	13	14	.20	1.000
			15	-.17	1.000
		14	13	-.20	1.000
			15	-.36	.204
		15	13	.17	1.000
			14	.36	.204

APPENDIX 8

ONE-WAY ANALYSIS OF VARIANCE: ASSESSMENT OF MEANS BETWEEN SEXES

	Index	Mean Square	F	Sig. (1-tailed)
Pretest	Factual Knowledge	.229	0.150	0.349
	Murder Knowledge	.943	1.324	0.125
	Alcohol Knowledge	1.475	3.796	0.026
	Positive Attitude	932.190	44.985	0.000
	Negative Attitude	98.790	16.034	0.000
	Behavior	24.068	10.020	0.001
Posttest	Factual Knowledge	2.266	1.396	0.119
	Murder Knowledge	2.897E-03	0.005	0.472
	Alcohol Knowledge	5.511E-03	0.015	0.451
	Positive Attitude	280.711	13.664	0.000
	Negative Attitude	22.922	3.532	0.030
	Behavior	17.678	5.195	0.011

REFERENCES

_____. Entertainment's role in violence debated. (1999, April 24). *Denton Record Chronicle*, p. 1.

_____. (1990). *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. (DHHS Publication (PHS) 91-50212). U.S. Department of Health and Human Services. Washington: US Government Printing Office.

_____. (1997). *Expenditure and Employment Statistics* (Internet report http://www.ojp.usdoj.gov/bjs/). Washington: Bureau of Justice Statistics, U.S. Department of Justice.

_____. (1999). Partnerships for Preventing Violence. Retrieved 1999, September 14 from the World Wide Web: http: //www .walcoff. com/ partnerships /definition.html.

_____. (1999). Safe schools. Washington, DC: http://www.psea.org/ psea2/infocenter.html: National Education Association.

Babbie, E. (1991). *Practicing Social Research*. (6th ed.). Belmont, CA: Wadsworth Publishing Co.

Bloom, M. (1981). *Primary Prevention: The Possible Science*. Englewood Cliffs: Prentice-Hall, Inc.

Brendtro, L., & Long, N. (1995). Breaking the Cycle of Conflict. *Educational Leadership*(February 1995), 52 -55.

Buka, S., & Earls, F. (1993). Early Determinants of Delinquency and Violence.

Health Affairs, 12(Number 4), 46 - 51.

Campbell, D. T., & Stanley, J. C. (1973). *Experimental and Quasi-Experimental Designs For Research*. Chicago: Rand McNally College Publishing Company.

Canada, G. (1995). *fist stick knife gun: A Personal History of Violence in America*. Boston: Beacon Press.

Currie, E., & Skolnick, J. H. (1997). *America's problems: Social issues and public policy*, (3rd ed.). New York: Longman.

Dill, V. S., & Haberman, M. (1995). Building a Gentler School. *Educational Leadership* (February 1995), 70 - 71.

Fenley, M. A., Gaiter, J. L., Hammett, M., Liburd, L. C., Mercy, J. A., O'Carroll, P. W., Onwuachi-Saunders, C., Powell, K. E., & Thornton, T. N. (1993). *The Prevention of Youth Violence: A Framework for Community Action.* Atlanta: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Office of the Assistant Director for Minority Health.

Flesch, R. F. (1974). *The Art of Readable Writing*. New York: Harper & Row.

Fraser, N. M., & Hipel, K. W. (1984). *Conflict Analysis*. (Vol. 11). New York: North-Holland.

Gelles, R. J. (1978). Violence toward Children in the United States. *American Journal of Orthopsychiatry, 48*(4), 580-592.

Gelles, R. J. (1993). Alcohol and Other Drugs Are Associated With Violence - They Are Not Its Cause. In R. J. Gelles & D. R. Loseke (Eds.), *Current Controversies on Family Violence* (pp. 390). Newbury Park: Sage.

Graham, H. D., & Gurr, T. R. (Eds.). (1979). *Violence in America: Historical & Comparative Perspectives*. Beverly Hills: Sage Publications, Inc.

Guttman, M. (1999, March 5-7, 1999). Resilience. *USA Weekend*.

Kim, J.O., & Mueller, C. W. (1978). *Introduction to Factor Analysis*, CA: (Vol. 13). Newbury Park: Sage.

Lawless, P. (1993). *Fear and Violence in the Workplace*. Minneapolis, MN: Northwestern National Life, Employee Benefits Division.

Martin, E. P. (1991). *Young Black Ghetto Males and the Sense of Impending Doom.* Paper presented at the Nurturing the Black Adolescent Male in the Family Context: A Public Health Responsibility, Columbia, South Carolina.

Mercy, J. (1995). *Violence in America: Bridging Sociology and Public Health.* Paper presented at the American Sociological Association Annual Conference, Washington, D.C.

Moulton, P. P. (1971). Violence - or Aggressive Nonviolent Resistance? (Vol. 178, pp. 31). Wallingford, Pennsylvania: Pendle Hill Publications.

Norusis, M. J. (1995). *SPSS 6.1: Guide to Data Analysis*. Englewood Cliffs, New Jersey: Prentice Hall.

Orpinas, P. K. (1994). *Skills Training and Social Influences for Violence Prevention in Middle Schools: A Curriculum Evaluation.* Unpublished Ph.D., The University of Texas Health Science Center at Houston, Houston.

Palermo, G. B., M.D. (1994). *The Faces of Violence*. (Vol. 1089). Springfield, Il.: Charles C. Thomas.

Prothrow-Stith D., D. (1987). *Violence prevention: Curriculum for Adolescents*. Newton, MA: Teenage Health Teaching Modules.

Prothrow-Stith, D., M.D. (1994). Building Violence Prevention into the Curriculum. *The School Administrator*(April, 1994), 8 - 12.

Prothrow-Stith, D., M.D., & Weissman, M. (1991). *Deadly Consequences*. New York: HarperCollins.

Reiss Jr., A. J., & Roth, J. A. (Eds.). (1993). *Understanding and Preventing Violence*. (Vol. 1). Washington, D.C.: National Academy Press.

Reiss Jr., A. J., & Roth, J. A. (Eds.). (1994). *Consequences and Control*. (Vol. 4). Washington: National Academy Press.

Rossi, P. H., & Freeman, H. E. (1993). *Evaluation: A Systematic Approach*. (5th ed.). Newbury Park: Sage Publications, Inc.

Sakyi-Addo, I. (1996). Telephone interview with Susan Crawford, Gang Control Unit of the Dallas Police Department .

Shepherd, K. K. (1994). Stemming Conflict Through Peer Mediation. *The School Administrator* (April 1994), 14 -17.

Sigler, R. T. (1995). The Cost of Tolerance for Violence. *Journal of Health Care for the Poor and Underserved, 6*(2), 124-135.

Timms, E., & Kendall, A. (1999, July 11). Violent truth. *The Dallas Morning News*, pp. 1, 12a, 13a.

Turpin, J., & Kurtz, L. R. (Eds.). (1997). *The Web of Violence: From Interpersonal to Global*. Urbana and Chicago: University of Illinois Press.

Twitchell, J. B. (1989). *Preposterous Violence: Fables of Aggression in Modern Culture*. New York: Oxford University Press.

World Health Organization. (1996). Violence and Injury Prevention, *Violence and Health*. Washington, DC: http://www.cdc.gov.

The findings imply that the adaptation of the Prothrow-Stith high school violence prevention curriculum is effective with lower grades. Designers of violence prevention, problem solving, peace making, conflict resolution and other prevention programs could look to the results of this evaluation when considering the factors that influence general knowledge, attitude and behavior toward violence. Differences between the sexes indicate an opportunity to tailor interventions and prevention strategies that stress the positive aspects of resolving conflict with peaceful, non-aggressive approaches. More detailed examination of the age differences may yield information about the influences that strengthen the quality of resilience or that indicate shifts in attitude and behavior in younger children.